REMARKS

A Notice of Allowance has been mailed from the USPTO for the above-referenced application. The Examiner contacted the undersigned by telephone indicating that Tables 5 and 6 were not sufficiently clear for printing the forthcoming Letters Patent. Applicants submit herewith Replacement Sheets containing Tables 5 and 6. No issue of new matter arises from this submission since the Replacement Sheets are merely clearer copies of the Tables 5 and 6 as filed.

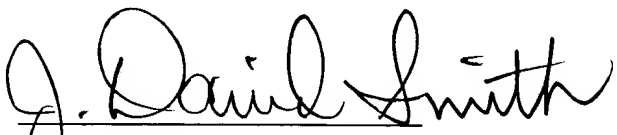
Fees

No fees are believed to be necessary in connection with this Amendment. However, if this is in error, authorization is hereby given to charge Deposit Account No. 11-1153 for any underpayment, or credit any overages.

Conclusion

If a discussion might be of assistance in resolving any issues, the Examiner is invited to telephone the undersigned.

Respectfully submitted,



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REPLACEMENT SHEET

Table 5

Atomic Structure Coordinates of the Free Form of the P/CAF Bromodomain

```
REMARK FILENAME="/bloch2/chris/BROMO_XPLOR_ARIA32/structures/it8/brd_187.pdb"
REMARK initial random number seed: 1.342876E+11
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REMARK energies: 157.923, 9.30626, 73.1523, 0, 23.1819, 36.4277, 0.228429
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REMARK violations.: 2, 0
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ATOM      1  CA  GLY     1      27.208  16.825  -6.349  1.00  0.00
ATOM      2  HA1 GLY     1      26.763  16.827  -5.365  1.00  0.00
ATOM      3  HA2 GLY     1      28.041  17.514  -6.357  1.00  0.00
ATOM      4  C   GLY     1      27.723  15.432  -6.650  1.00  0.00
ATOM      5  O   GLY     1      28.656  15.263  -7.435  1.00  0.00
ATOM      6  N   GLY     1      26.194  17.285  -7.337  1.00  0.00
ATOM      7  HT1 GLY     1      26.586  18.049  -7.923  1.00  0.00
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ATOM     10  N   SER     2      27.113  14.431  -6.024  1.00  0.00
ATOM     11  HN  SER     2      26.376  14.629  -5.409  1.00  0.00
ATOM     12  CA  SER     2      27.516  13.044  -6.226  1.00  0.00
ATOM     13  HA  SER     2      28.481  13.047  -6.712  1.00  0.00
ATOM     14  CB  SER     2      27.638  12.329  -4.878  1.00  0.00
ATOM     15  HB1 SER     2      26.904  12.729  -4.193  1.00  0.00
ATOM     16  HB2 SER     2      27.462  11.273  -5.017  1.00  0.00
ATOM     17  OG  SER     2      28.927  12.508  -4.319  1.00  0.00
ATOM     18  HG  SER     2      29.571  12.014  -4.832  1.00  0.00
ATOM     19  C   SER     2      26.519  12.308  -7.114  1.00  0.00
ATOM     20  O   SER     2      25.320  12.288  -6.835  1.00  0.00
ATOM     21  N   HIS     3      27.022  11.698  -8.183  1.00  0.00
ATOM     22  HN  HIS     3      27.986  11.747  -8.353  1.00  0.00
ATOM     23  CA  HIS     3      26.173  10.955  -9.106  1.00  0.00
ATOM     24  HA  HIS     3      25.157  11.295  -8.967  1.00  0.00
ATOM     25  CB  HIS     3      26.594  11.222 -10.553  1.00  0.00
ATOM     26  HB1 HIS     3      26.616  12.288 -10.723  1.00  0.00
ATOM     27  HB2 HIS     3      27.581  10.814 -10.714  1.00  0.00
ATOM     28  CG  HIS     3      25.671  10.612 -11.561  1.00  0.00
ATOM     29  ND1 HIS     3      25.985  10.494 -12.900  1.00  0.00
ATOM     30  HD1 HIS     3      26.820  10.790 -13.320  1.00  0.00
ATOM     31  CD2 HIS     3      24.433  10.080 -11.420  1.00  0.00
ATOM     32  HD2 HIS     3      23.870  10.003 -10.501  1.00  0.00
ATOM     33  CE1 HIS     3      24.981   9.918 -13.537  1.00  0.00
ATOM     34  HE1 HIS     3      24.945   9.698 -14.594  1.00  0.00
ATOM     35  NE2 HIS     3      24.028   9.658 -12.662  1.00  0.00
ATOM     36  HE2 HIS     3      23.171   9.230 -12.868  1.00  0.00
ATOM     37  C   HIS     3      26.233   9.459  -8.817  1.00  0.00
ATOM     38  O   HIS     3      26.214   8.638  -9.734  1.00  0.00
ATOM     39  N   MET     4      26.305   9.111  -7.536  1.00  0.00
ATOM     40  HN  MET     4      26.314   9.811  -6.850  1.00  0.00
ATOM     41  CA  MET     4      26.364   7.713  -7.128  1.00  0.00
ATOM     42  HA  MET     4      26.164   7.105  -7.998  1.00  0.00
ATOM     43  CB  MET     4      27.755   7.374  -6.591  1.00  0.00
ATOM     44  HB1 MET     4      28.456   8.117  -6.944  1.00  0.00
ATOM     45  HB2 MET     4      27.730   7.400  -5.512  1.00  0.00
ATOM     46  CG  MET     4      28.254   6.005  -7.024  1.00  0.00
ATOM     47  HG1 MET     4      27.433   5.306  -6.972  1.00  0.00
ATOM     48  HG2 MET     4      28.606   6.071  -8.043  1.00  0.00
ATOM     49  SD  MET     4      29.597   5.394  -5.988  1.00  0.00
ATOM     50  CE  MET     4      28.922   3.825  -5.449  1.00  0.00
ATOM     51  HE1 MET     4      29.243   3.623  -4.438  1.00  0.00
ATOM     52  HE2 MET     4      29.273   3.039  -6.102  1.00  0.00
ATOM     53  HE3 MET     4      27.843   3.866  -5.483  1.00  0.00
ATOM     54  C   MET     4      25.310   7.413  -6.067  1.00  0.00
ATOM     55  O   MET     4      25.333   7.983  -4.977  1.00  0.00
ATOM     56  N   SER     5      24.386   6.517  -6.398  1.00  0.00
ATOM     57  HN  SER     5      24.422   6.098  -7.283  1.00  0.00
ATOM     58  CA  SER     5      23.321   6.141  -5.476  1.00  0.00
ATOM     59  HA  SER     5      23.780   5.750  -4.580  1.00  0.00
ATOM     60  CB  SER     5      22.479   7.366  -5.111  1.00  0.00
ATOM     61  HB1 SER     5      22.188   7.882  -6.014  1.00  0.00
ATOM     62  HB2 SER     5      23.062   8.029  -4.490  1.00  0.00
ATOM     63  OG  SER     5      21.309   6.990  -4.405  1.00  0.00
ATOM     64  HG  SER     5      21.060   7.693  -3.800  1.00  0.00
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ATOM     66  O   SER     5      21.471   5.362  -6.794  1.00  0.00
ATOM     67  N   LYS     6      22.756   3.805  -5.800  1.00  0.00
ATOM     68  HN  LYS     6      23.532   3.630  -5.228  1.00  0.00
ATOM     69  CA  LYS     6      21.987   2.680  -6.319  1.00  0.00
ATOM     70  HA  LYS     6      21.642   2.942  -7.308  1.00  0.00
ATOM     71  CB  LYS     6      22.869   1.433  -6.409  1.00  0.00
ATOM     72  HB1 LYS     6      22.266   0.563  -6.192  1.00  0.00
ATOM     73  HB2 LYS     6      23.655   1.508  -5.673  1.00  0.00
ATOM     74  CG  LYS     6      23.510   1.238  -7.773  1.00  0.00
ATOM     75  HG1 LYS     6      24.045   2.138  -8.041  1.00  0.00
ATOM     76  HG2 LYS     6      24.201   0.409  -7.721  1.00  0.00
ATOM     77  CD  LYS     6      22.469   0.947  -8.842  1.00  0.00
ATOM     78  HD1 LYS     6      21.794   1.787  -8.911  1.00  0.00
ATOM     79  HD2 LYS     6      22.970   0.804  -9.788  1.00  0.00
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ATOM     81  HE1 LYS     6      21.107  -0.129  -7.608  1.00  0.00
ATOM     82  HE2 LYS     6      20.987  -0.503  -9.327  1.00  0.00
ATOM     83  NZ  LYS     6      22.548  -1.489  -8.317  1.00  0.00
ATOM     84  HZ1 LYS     6      23.320  -1.481  -9.014  1.00  0.00
ATOM     85  HZ2 LYS     6      21.999  -2.365  -8.435  1.00  0.00
ATOM     86  HZ3 LYS     6      22.958  -1.476  -7.362  1.00  0.00
ATOM     87  C   LYS     6      20.776   2.397  -5.436  1.00  0.00
ATOM     88  O   LYS     6      20.863   1.638  -4.471  1.00  0.00
ATOM     89  N   GLU     7      19.646   3.011  -5.773  1.00  0.00
ATOM     90  HN  GLU     7      19.637   3.606  -6.552  1.00  0.00
ATOM     91  CA  GLU     7      18.420   2.825  -5.005  1.00  0.00
ATOM     92  HA  GLU     7      18.531   1.926  -4.418  1.00  0.00
ATOM     93  CB  GLU     7      18.200   4.011  -4.064  1.00  0.00
ATOM     94  HB1 GLU     7      18.505   4.916  -4.567  1.00  0.00
ATOM     95  HB2 GLU     7      17.148   4.078  -3.828  1.00  0.00
ATOM     96  CG  GLU     7      18.975   3.904  -2.761  1.00  0.00
ATOM     97  HG1 GLU     7      19.746   3.156  -2.876  1.00  0.00
ATOM     98  HG2 GLU     7      19.430   4.860  -2.548  1.00  0.00
ATOM     99  CD  GLU     7      18.095   3.515  -1.589  1.00  0.00
ATOM    100  OE1 GLU     7      17.118   4.243  -1.312  1.00  0.00
ATOM    101  OE2 GLU     7      18.383   2.483  -0.947  1.00  0.00
ATOM    102  C   GLU     7      17.215   2.662  -5.928  1.00  0.00
ATOM    103  O   GLU     7      16.278   3.461  -5.886  1.00  0.00
ATOM    104  N   PRO     8      17.218   1.617  -6.772  1.00  0.00
ATOM    105  CA  PRO     8      16.120   1.352  -7.702  1.00  0.00
ATOM    106  HA  PRO     8      15.785   2.256  -8.189  1.00  0.00
ATOM    107  CB  PRO     8      16.760   0.419  -8.727  1.00  0.00
ATOM    108  HB1 PRO     8      17.200   1.002  -9.523  1.00  0.00
ATOM    109  HB2 PRO     8      16.011  -0.245  -9.130  1.00  0.00
ATOM    110  CG  PRO     8      17.796  -0.327  -7.958  1.00  0.00
ATOM    111  HG1 PRO     8      17.357  -1.205  -7.508  1.00  0.00
ATOM    112  HG2 PRO     8      18.607  -0.608  -8.614  1.00  0.00
ATOM    113  CD  PRO     8      18.294   0.613  -6.889  1.00  0.00
ATOM    114  HD1 PRO     8      18.429   0.085  -5.956  1.00  0.00
ATOM    115  HD2 PRO     8      19.220   1.076  -7.197  1.00  0.00
ATOM    116  C   PRO     8      14.938   0.669  -7.021  1.00  0.00
ATOM    117  O   PRO     8      13.782   0.924  -7.360  1.00  0.00
ATOM    118  N   ARG     9      15.236  -0.196  -6.057  1.00  0.00
ATOM    119  HN  ARG     9      16.176  -0.357  -5.833  1.00  0.00
ATOM    120  CA  ARG     9      14.199  -0.917  -5.328  1.00  0.00
ATOM    121  HA  ARG     9      13.522  -0.189  -4.906  1.00  0.00
ATOM    122  CB  ARG     9      13.421  -1.830  -6.279  1.00  0.00
ATOM    123  HB1 ARG     9      12.812  -2.504  -5.695  1.00  0.00
ATOM    124  HB2 ARG     9      12.778  -1.222  -6.898  1.00  0.00
ATOM    125  CG  ARG     9      14.313  -2.661  -7.188  1.00  0.00
ATOM    126  HG1 ARG     9      14.295  -2.236  -8.181  1.00  0.00
ATOM    127  HG2 ARG     9      15.322  -2.640  -6.803  1.00  0.00
ATOM    128  CD  ARG     9      13.843  -4.106  -7.262  1.00  0.00
ATOM    129  HD1 ARG     9      13.831  -4.518  -6.264  1.00  0.00
ATOM    130  HD2 ARG     9      12.844  -4.125  -7.671  1.00  0.00
ATOM    131  NE  ARG     9      14.714  -4.926  -8.102  1.00  0.00
ATOM    132  HE  ARG     9      15.302  -4.464  -8.735  1.00  0.00
ATOM    133  CZ  ARG     9      14.745  -6.255  -8.053  1.00  0.00
ATOM    134  NH1 ARG     9      13.960  -6.908  -7.208  1.00  0.00
ATOM    135 HH11 ARG     9      13.342  -6.401  -6.606  1.00  0.00
ATOM    136 HH12 ARG     9      13.985  -7.907  -7.172  1.00  0.00
ATOM    137  NH2 ARG     9      15.563  -6.932  -8.850  1.00  0.00
ATOM    138 HH21 ARG     9      16.157  -6.444  -9.489  1.00  0.00
ATOM    139 HH22 ARG     9      15.585  -7.931  -8.810  1.00  0.00
ATOM    140  C   ARG     9      14.800  -1.744  -4.196  1.00  0.00
ATOM    141  O   ARG     9      14.421  -2.897  -3.991  1.00  0.00
ATOM    142  N   ASP    10      15.732  -1.144  -3.458  1.00  0.00
ATOM    143  HN  ASP    10      15.988  -0.223  -3.673  1.00  0.00
ATOM    144  CA  ASP    10      16.393  -1.824  -2.345  1.00  0.00
ATOM    145  HA  ASP    10      17.087  -2.540  -2.760  1.00  0.00
ATOM    146  CB  ASP    10      17.169  -0.813  -1.497  1.00  0.00
ATOM    147  HB1 ASP    10      17.594  -0.061  -2.146  1.00  0.00
ATOM    148  HB2 ASP    10      16.490  -0.341  -0.802  1.00  0.00
ATOM    149  CG  ASP    10      18.292  -1.457  -0.708  1.00  0.00
ATOM    150  OD1 ASP    10      18.771  -2.532  -1.126  1.00  0.00
ATOM    151  OD2 ASP    10      18.692  -0.886   0.328  1.00  0.00
ATOM    152  C   ASP    10      15.383  -2.565  -1.468  1.00  0.00
ATOM    153  O   ASP    10      14.728  -1.961  -0.619  1.00  0.00
ATOM    154  N   PRO    11      15.249  -3.889  -1.658  1.00  0.00
ATOM    155  CA  PRO    11      14.309  -4.709  -0.887  1.00  0.00
ATOM    156  HA  PRO    11      13.311  -4.297  -0.920  1.00  0.00
ATOM    157  CB  PRO    11      14.326  -6.068  -1.607  1.00  0.00
ATOM    158  HB1 PRO    11      13.311  -6.399  -1.772  1.00  0.00
ATOM    159  HB2 PRO    11      14.849  -6.791  -0.999  1.00  0.00
ATOM    160  CG  PRO    11      15.036  -5.829  -2.899  1.00  0.00
ATOM    161  HG1 PRO    11      15.582  -6.715  -3.188  1.00  0.00
ATOM    162  HG2 PRO    11      14.324  -5.561  -3.666  1.00  0.00
ATOM    163  CD  PRO    11      15.981  -4.692  -2.646  1.00  0.00
ATOM    164  HD1 PRO    11      16.155  -4.133  -3.552  1.00  0.00
ATOM    165  HD2 PRO    11      16.911  -5.056  -2.237  1.00  0.00
ATOM    166  C   PRO    11      14.732  -4.881   0.572  1.00  0.00
ATOM    167  O   PRO    11      13.991  -5.446   1.375  1.00  0.00
ATOM    168  N   ASP    12      15.926  -4.397   0.912  1.00  0.00
ATOM    169  HN  ASP    12      16.477  -3.954   0.236  1.00  0.00
ATOM    170  CA  ASP    12      16.430  -4.508   2.276  1.00  0.00
ATOM    171  HA  ASP    12      16.402  -5.551   2.554  1.00  0.00
ATOM    172  CB  ASP    12      17.874  -4.008   2.352  1.00  0.00
ATOM    173  HB1 ASP    12      18.146  -3.873   3.389  1.00  0.00
ATOM    174  HB2 ASP    12      17.948  -3.061   1.839  1.00  0.00
ATOM    175  CG  ASP    12      18.856  -4.975   1.721  1.00  0.00
ATOM    176  OD1 ASP    12      18.870  -6.157   2.125  1.00  0.00
ATOM    177  OD2 ASP    12      19.615  -4.549   0.824  1.00  0.00
ATOM    178  C   ASP    12      15.555  -3.719   3.243  1.00  0.00
ATOM    179  O   ASP    12      14.689  -4.282   3.913  1.00  0.00
ATOM    180  N   GLN    13      15.785  -2.412   3.309  1.00  0.00
ATOM    181  HN  GLN    13      16.486  -2.020   2.748  1.00  0.00
ATOM    182  CA  GLN    13      15.012  -1.546   4.191  1.00  0.00
ATOM    183  HA  GLN    13      15.115  -1.923   5.197  1.00  0.00
ATOM    184  CB  GLN    13      15.550  -0.115   4.134  1.00  0.00
ATOM    185  HB1 GLN    13      15.055   0.411   3.331  1.00  0.00
ATOM    186  HB2 GLN    13      16.610  -0.149   3.931  1.00  0.00
ATOM    187  CG  GLN    13      15.336   0.669   5.420  1.00  0.00
ATOM    188  HG1 GLN    13      15.288  -0.025   6.246  1.00  0.00
ATOM    189  HG2 GLN    13      14.403   1.208   5.347  1.00  0.00
ATOM    190  CD  GLN    13      16.450   1.662   5.687  1.00  0.00
ATOM    191  OE1 GLN    13      16.875   2.391   4.790  1.00  0.00
ATOM    192  NE2 GLN    13      16.930   1.695   6.925  1.00  0.00
ATOM    193 HE21 GLN    13      17.651   2.328   7.125  1.00  0.00
ATOM    194 HE22 GLN    13      16.543   1.085   7.587  1.00  0.00
ATOM    195  C   GLN    13      13.538  -1.566   3.807  1.00  0.00
ATOM    196  O   GLN    13      12.658  -1.499   4.666  1.00  0.00
ATOM    197  N   LEU    14      13.278  -1.666   2.509  1.00  0.00
ATOM    198  HN  LEU    14      14.025  -1.723   1.877  1.00  0.00
ATOM    199  CA  LEU    14      11.914  -1.713   1.999  1.00  0.00
ATOM    200  HA  LEU    14      11.445  -0.764   2.212  1.00  0.00
ATOM    201  CB  LEU    14      11.939  -1.932   0.481  1.00  0.00
ATOM    202  HB1 LEU    14      12.218  -1.001   0.012  1.00  0.00
ATOM    203  HB2 LEU    14      12.702  -2.664   0.261  1.00  0.00
ATOM    204  CG  LEU    14      10.625  -2.407  -0.145  1.00  0.00
ATOM    205  HG  LEU    14       9.801  -1.900   0.333  1.00  0.00
ATOM    206  CD1 LEU    14      10.592  -2.066  -1.628  1.00  0.00
ATOM    207 HD11 LEU    14      11.506  -2.403  -2.095  1.00  0.00
ATOM    208 HD12 LEU    14      10.499  -0.997  -1.749  1.00  0.00
ATOM    209 HD13 LEU    14       9.749  -2.556  -2.091  1.00  0.00
ATOM    210  CD2 LEU    14      10.444  -3.902   0.064  1.00  0.00
ATOM    211 HD21 LEU    14      11.402  -4.354   0.275  1.00  0.00
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ATOM    213 HD23 LEU    14       9.777  -4.071   0.897  1.00  0.00
ATOM    214  C   LEU    14      11.121  -2.822   2.688  1.00  0.00
ATOM    215  O   LEU    14      10.019  -2.595   3.188  1.00  0.00
ATOM    216  N   TYR    15      11.697  -4.018   2.715  1.00  0.00
ATOM    217  HN  TYR    15      12.579  -4.131   2.303  1.00  0.00
ATOM    218  CA  TYR    15      11.061  -5.167   3.350  1.00  0.00
ATOM    219  HA  TYR    15      10.125  -5.357   2.843  1.00  0.00
ATOM    220  CB  TYR    15      11.964  -6.394   3.218  1.00  0.00
ATOM    221  HB1 TYR    15      12.163  -6.569   2.173  1.00  0.00
ATOM    222  HB2 TYR    15      12.896  -6.200   3.728  1.00  0.00
ATOM    223  CG  TYR    15      11.374  -7.659   3.798  1.00  0.00
ATOM    224  CD1 TYR    15      12.076  -8.408   4.734  1.00  0.00
ATOM    225  HD1 TYR    15      13.051  -8.070   5.053  1.00  0.00
ATOM    226  CD2 TYR    15      10.121  -8.111   3.402  1.00  0.00
ATOM    227  HD2 TYR    15       9.564  -7.543   2.671  1.00  0.00
ATOM    228  CE1 TYR    15      11.542  -9.565   5.268  1.00  0.00
ATOM    229  HE1 TYR    15      12.102 -10.132   5.998  1.00  0.00
ATOM    230  CE2 TYR    15       9.582  -9.269   3.929  1.00  0.00
ATOM    231  HE2 TYR    15       8.606  -9.604   3.610  1.00  0.00
ATOM    232  CZ  TYR    15      10.296  -9.993   4.860  1.00  0.00
ATOM    233  OH  TYR    15       9.761 -11.145   5.388  1.00  0.00
ATOM    234  HH  TYR    15      10.392 -11.863   5.295  1.00  0.00
ATOM    235  C   TYR    15      10.776  -4.888   4.821  1.00  0.00
ATOM    236  O   TYR    15       9.750  -5.307   5.356  1.00  0.00
ATOM    237  N   SER    16      11.694  -4.181   5.471  1.00  0.00
ATOM    238  HN  SER    16      12.487  -3.869   4.989  1.00  0.00
ATOM    239  CA  SER    16      11.535  -3.836   6.878  1.00  0.00
ATOM    240  HA  SER    16      11.318  -4.746   7.420  1.00  0.00
ATOM    241  CB  SER    16      12.824  -3.220   7.425  1.00  0.00
ATOM    242  HB1 SER    16      13.672  -3.768   7.042  1.00  0.00
ATOM    243  HB2 SER    16      12.889  -2.189   7.111  1.00  0.00
ATOM    244  OG  SER    16      12.852  -3.268   8.841  1.00  0.00
ATOM    245  HG  SER    16      13.743  -3.471   9.137  1.00  0.00
ATOM    246  C   SER    16      10.373  -2.867   7.061  1.00  0.00
ATOM    247  O   SER    16       9.746  -2.824   8.120  1.00  0.00
ATOM    248  N   THR    17      10.087  -2.096   6.017  1.00  0.00
ATOM    249  HN  THR    17      10.615  -2.189   5.195  1.00  0.00
ATOM    250  CA  THR    17       8.983  -1.146   6.049  1.00  0.00
ATOM    251  HA  THR    17       8.965  -0.685   7.025  1.00  0.00
ATOM    252  CB  THR    17       9.182  -0.061   4.982  1.00  0.00
ATOM    253  HB  THR    17       9.393  -0.537   4.037  1.00  0.00
ATOM    254  OG1 THR    17      10.278   0.771   5.316  1.00  0.00
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REPLACEMENT SHEET

ATOM	255	HG1	THR	17	10.098	1.223	6.144	1.00	0.00
ATOM	256	CG2	THR	17	7.971	0.832	4.783	1.00	0.00
ATOM	257	HG21	THR	17	7.078	0.224	4.720	1.00	0.00
ATOM	258	HG22	THR	17	8.088	1.395	3.867	1.00	0.00
ATOM	259	HG23	THR	17	7.883	1.513	5.616	1.00	0.00
ATOM	260	C	THR	17	7.662	-1.866	5.821	1.00	0.00
ATOM	261	O	THR	17	6.756	-1.792	6.646	1.00	0.00
ATOM	262	N	LEU	18	7.574	-2.569	4.697	1.00	0.00
ATOM	263	HN	LEU	18	8.339	-2.578	4.083	1.00	0.00
ATOM	264	CA	LEU	18	6.369	-3.302	4.330	1.00	0.00
ATOM	265	HA	LEU	18	5.555	-2.597	4.289	1.00	0.00
ATOM	266	CB	LEU	18	6.550	-3.928	2.955	1.00	0.00
ATOM	267	HB1	LEU	18	7.307	-4.694	3.026	1.00	0.00
ATOM	268	HB2	LEU	18	5.619	-4.389	2.661	1.00	0.00
ATOM	269	CG	LEU	18	6.964	-2.940	1.875	1.00	0.00
ATOM	270	HG	LEU	18	7.969	-2.603	2.075	1.00	0.00
ATOM	271	CD1	LEU	18	6.954	-3.607	0.510	1.00	0.00
ATOM	272	HD11	LEU	18	7.945	-3.963	0.274	1.00	0.00
ATOM	273	HD12	LEU	18	6.640	-2.894	-0.236	1.00	0.00
ATOM	274	HD13	LEU	18	6.270	-4.442	0.524	1.00	0.00
ATOM	275	CD2	LEU	18	6.048	-1.722	1.899	1.00	0.00
ATOM	276	HD21	LEU	18	5.138	-1.963	2.430	1.00	0.00
ATOM	277	HD22	LEU	18	5.811	-1.428	0.889	1.00	0.00
ATOM	278	HD23	LEU	18	6.549	-0.908	2.401	1.00	0.00
ATOM	279	C	LEU	18	6.037	-4.376	5.349	1.00	0.00
ATOM	280	O	LEU	18	4.961	-4.372	5.942	1.00	0.00
ATOM	281	N	LYS	19	6.956	-5.310	5.541	1.00	0.00
ATOM	282	HN	LYS	19	7.802	-5.262	5.048	1.00	0.00
ATOM	283	CA	LYS	19	6.753	-6.372	6.514	1.00	0.00
ATOM	284	HA	LYS	19	5.946	-6.995	6.158	1.00	0.00
ATOM	285	CB	LYS	19	8.029	-7.225	6.635	1.00	0.00
ATOM	286	HB1	LYS	19	8.522	-7.243	5.674	1.00	0.00
ATOM	287	HB2	LYS	19	7.748	-8.232	6.897	1.00	0.00
ATOM	288	CG	LYS	19	9.033	-6.730	7.669	1.00	0.00
ATOM	289	HG1	LYS	19	8.693	-7.018	8.653	1.00	0.00
ATOM	290	HG2	LYS	19	9.096	-5.653	7.608	1.00	0.00
ATOM	291	CD	LYS	19	10.412	-7.319	7.429	1.00	0.00
ATOM	292	HD1	LYS	19	10.559	-7.440	6.365	1.00	0.00
ATOM	293	HD2	LYS	19	11.156	-6.643	7.823	1.00	0.00
ATOM	294	CE	LYS	19	10.567	-8.671	8.106	1.00	0.00
ATOM	295	HE1	LYS	19	9.987	-9.401	7.560	1.00	0.00
ATOM	296	HE2	LYS	19	10.193	-8.598	9.117	1.00	0.00
ATOM	297	NZ	LYS	19	11.988	-9.115	8.146	1.00	0.00
ATOM	298	HZ1	LYS	19	12.044	-10.147	8.030	1.00	0.00
ATOM	299	HZ2	LYS	19	12.418	-8.855	9.057	1.00	0.00
ATOM	300	HZ3	LYS	19	12.526	-8.661	7.380	1.00	0.00
ATOM	301	C	LYS	19	6.349	-5.772	7.863	1.00	0.00
ATOM	302	O	LYS	19	5.624	-6.390	8.646	1.00	0.00
ATOM	303	N	SER	20	6.797	-4.542	8.100	1.00	0.00
ATOM	304	HN	SER	20	7.346	-4.092	7.419	1.00	0.00
ATOM	305	CA	SER	20	6.482	-3.841	9.336	1.00	0.00
ATOM	306	HA	SER	20	6.548	-4.551	10.141	1.00	0.00
ATOM	307	CB	SER	20	7.481	-2.708	9.581	1.00	0.00
ATOM	308	HB1	SER	20	7.647	-2.171	8.659	1.00	0.00
ATOM	309	HB2	SER	20	8.416	-3.123	9.929	1.00	0.00
ATOM	310	OG	SER	20	6.996	-1.801	10.556	1.00	0.00
ATOM	311	HG	SER	20	7.552	-1.841	11.337	1.00	0.00
ATOM	312	C	SER	20	5.070	-3.288	9.292	1.00	0.00
ATOM	313	O	SER	20	4.188	-3.752	10.016	1.00	0.00
ATOM	314	N	ILE	21	4.851	-2.311	8.423	1.00	0.00
ATOM	315	HN	ILE	21	5.590	-1.989	7.866	1.00	0.00
ATOM	316	CA	ILE	21	3.531	-1.717	8.268	1.00	0.00
ATOM	317	HA	ILE	21	3.312	-1.154	9.164	1.00	0.00
ATOM	318	CB	ILE	21	3.477	-0.752	7.069	1.00	0.00
ATOM	319	HB	ILE	21	2.442	-0.564	6.839	1.00	0.00
ATOM	320	CG1	ILE	21	4.155	-1.368	5.846	1.00	0.00
ATOM	321	HG11	ILE	21	4.819	-0.640	5.404	1.00	0.00
ATOM	322	HG12	ILE	21	4.723	-2.227	6.152	1.00	0.00
ATOM	323	CG2	ILE	21	4.130	0.573	7.427	1.00	0.00
ATOM	324	HG21	ILE	21	3.498	1.385	7.101	1.00	0.00
ATOM	325	HG22	ILE	21	5.089	0.644	6.935	1.00	0.00
ATOM	326	HG23	ILE	21	4.268	0.630	8.496	1.00	0.00
ATOM	327	CD1	ILE	21	3.185	-1.819	4.782	1.00	0.00
ATOM	328	HD11	ILE	21	2.645	-2.684	5.134	1.00	0.00
ATOM	329	HD12	ILE	21	3.729	-2.074	3.885	1.00	0.00
ATOM	330	HD13	ILE	21	2.489	-1.022	4.568	1.00	0.00
ATOM	331	C	ILE	21	2.472	-2.801	8.095	1.00	0.00
ATOM	332	O	ILE	21	1.487	-2.838	8.823	1.00	0.00
ATOM	333	N	LEU	22	2.710	-3.715	7.164	1.00	0.00
ATOM	334	HN	LEU	22	3.520	-3.646	6.622	1.00	0.00
ATOM	335	CA	LEU	22	1.785	-4.812	6.920	1.00	0.00
ATOM	336	HA	LEU	22	0.864	-4.390	6.544	1.00	0.00
ATOM	337	CB	LEU	22	2.361	-5.772	5.874	1.00	0.00
ATOM	338	HB1	LEU	22	1.785	-6.685	5.900	1.00	0.00
ATOM	339	HB2	LEU	22	3.379	-6.000	6.147	1.00	0.00
ATOM	340	CG	LEU	22	2.360	-5.245	4.439	1.00	0.00
ATOM	341	HG	LEU	22	3.054	-4.421	4.365	1.00	0.00
ATOM	342	CD1	LEU	22	2.815	-6.329	3.474	1.00	0.00
ATOM	343	HD11	LEU	22	2.102	-6.416	2.668	1.00	0.00
ATOM	344	HD12	LEU	22	2.885	-7.271	3.997	1.00	0.00
ATOM	345	HD13	LEU	22	3.783	-6.069	3.071	1.00	0.00
ATOM	346	CD2	LEU	22	0.980	-4.733	4.057	1.00	0.00
ATOM	347	HD21	LEU	22	0.926	-3.671	4.243	1.00	0.00
ATOM	348	HD22	LEU	22	0.234	-5.242	4.647	1.00	0.00
ATOM	349	HD23	LEU	22	0.803	-4.924	3.008	1.00	0.00
ATOM	350	C	LEU	22	1.493	-5.568	8.214	1.00	0.00
ATOM	351	O	LEU	22	0.340	-5.862	8.525	1.00	0.00
ATOM	352	N	GLN	23	2.546	-5.868	8.971	1.00	0.00
ATOM	353	HN	GLN	23	3.447	-5.617	8.666	1.00	0.00
ATOM	354	CA	GLN	23	2.402	-6.598	10.226	1.00	0.00
ATOM	355	HA	GLN	23	2.066	-7.596	9.989	1.00	0.00
ATOM	356	CB	GLN	23	3.754	-6.684	10.940	1.00	0.00
ATOM	357	HB1	GLN	23	3.588	-6.635	12.006	1.00	0.00
ATOM	358	HB2	GLN	23	4.360	-5.842	10.640	1.00	0.00
ATOM	359	CG	GLN	23	4.528	-7.958	10.637	1.00	0.00
ATOM	360	HG1	GLN	23	4.592	-8.082	9.566	1.00	0.00
ATOM	361	HG2	GLN	23	5.523	-7.865	11.048	1.00	0.00
ATOM	362	CD	GLN	23	3.875	-9.191	11.231	1.00	0.00
ATOM	363	OE1	GLN	23	3.304	-9.141	12.320	1.00	0.00
ATOM	364	NE2	GLN	23	3.958	-10.308	10.517	1.00	0.00
ATOM	365	HE21	GLN	23	3.545	-11.120	10.879	1.00	0.00
ATOM	366	HE22	GLN	23	4.429	-10.275	9.658	1.00	0.00
ATOM	367	C	GLN	23	1.374	-5.941	11.151	1.00	0.00
ATOM	368	O	GLN	23	0.462	-6.604	11.646	1.00	0.00
ATOM	369	N	GLN	24	1.542	-4.645	11.404	1.00	0.00
ATOM	370	HN	GLN	24	2.303	-4.175	11.002	1.00	0.00
ATOM	371	CA	GLN	24	0.659	-3.920	12.317	1.00	0.00
ATOM	372	HA	GLN	24	0.434	-4.580	13.142	1.00	0.00
ATOM	373	CB	GLN	24	1.369	-2.679	12.863	1.00	0.00
ATOM	374	HB1	GLN	24	2.330	-2.973	13.260	1.00	0.00
ATOM	375	HB2	GLN	24	0.774	-2.258	13.659	1.00	0.00
ATOM	376	CG	GLN	24	1.596	-1.602	11.817	1.00	0.00
ATOM	377	HG1	GLN	24	0.680	-1.044	11.689	1.00	0.00
ATOM	378	HG2	GLN	24	1.860	-2.077	10.885	1.00	0.00
ATOM	379	CD	GLN	24	2.702	-0.638	12.200	1.00	0.00
ATOM	380	OE1	GLN	24	3.210	-0.671	13.320	1.00	0.00
ATOM	381	NE2	GLN	24	3.082	0.227	11.266	1.00	0.00
ATOM	382	HE21	GLN	24	2.633	0.195	10.395	1.00	0.00
ATOM	383	HE22	GLN	24	3.795	0.862	11.486	1.00	0.00
ATOM	384	C	GLN	24	-0.658	-3.511	11.654	1.00	0.00
ATOM	385	O	GLN	24	-1.727	-3.682	12.237	1.00	0.00
ATOM	386	N	VAL	25	-0.577	-2.936	10.456	1.00	0.00
ATOM	387	HN	VAL	25	0.298	-2.811	10.047	1.00	0.00
ATOM	388	CA	VAL	25	-1.769	-2.477	9.743	1.00	0.00
ATOM	389	HA	VAL	25	-2.139	-1.597	10.251	1.00	0.00
ATOM	390	CB	VAL	25	-1.454	-2.085	8.285	1.00	0.00
ATOM	391	HB	VAL	25	-2.344	-1.670	7.845	1.00	0.00
ATOM	392	CG1	VAL	25	-0.364	-1.025	8.239	1.00	0.00
ATOM	393	HG11	VAL	25	-0.774	-0.102	7.858	1.00	0.00
ATOM	394	HG12	VAL	25	0.434	-1.358	7.591	1.00	0.00
ATOM	395	HG13	VAL	25	0.024	-0.863	9.234	1.00	0.00
ATOM	396	CG2	VAL	25	-1.061	-3.301	7.473	1.00	0.00
ATOM	397	HG21	VAL	25	-1.924	-3.934	7.330	1.00	0.00
ATOM	398	HG22	VAL	25	-0.295	-3.848	7.997	1.00	0.00
ATOM	399	HG23	VAL	25	-0.684	-2.982	6.511	1.00	0.00
ATOM	400	C	VAL	25	-2.865	-3.536	9.760	1.00	0.00
ATOM	401	O	VAL	25	-4.042	-3.213	9.907	1.00	0.00
ATOM	402	N	LYS	26	-2.478	-4.805	9.670	1.00	0.00
ATOM	403	HN	LYS	26	-1.525	-5.013	9.579	1.00	0.00
ATOM	404	CA	LYS	26	-3.448	-5.893	9.728	1.00	0.00
ATOM	405	HA	LYS	26	-4.076	-5.827	8.852	1.00	0.00
ATOM	406	CB	LYS	26	-2.739	-7.248	9.740	1.00	0.00
ATOM	407	HB1	LYS	26	-2.064	-7.280	10.582	1.00	0.00
ATOM	408	HB2	LYS	26	-3.479	-8.026	9.853	1.00	0.00
ATOM	409	CG	LYS	26	-1.940	-7.530	8.479	1.00	0.00
ATOM	410	HG1	LYS	26	-2.552	-8.102	7.797	1.00	0.00
ATOM	411	HG2	LYS	26	-1.665	-6.591	8.020	1.00	0.00
ATOM	412	CD	LYS	26	-0.679	-8.317	8.790	1.00	0.00
ATOM	413	HD1	LYS	26	-0.295	-7.995	9.747	1.00	0.00
ATOM	414	HD2	LYS	26	0.054	-8.123	8.020	1.00	0.00
ATOM	415	CE	LYS	26	-0.955	-9.811	8.844	1.00	0.00
ATOM	416	HE1	LYS	26	-0.358	-10.245	9.632	1.00	0.00
ATOM	417	HE2	LYS	26	-2.002	-9.962	9.062	1.00	0.00
ATOM	418	NZ	LYS	26	-0.625	-10.486	7.558	1.00	0.00
ATOM	419	HZ1	LYS	26	0.302	-10.951	7.627	1.00	0.00
ATOM	420	HZ2	LYS	26	-0.595	-9.790	6.787	1.00	0.00
ATOM	421	HZ3	LYS	26	-1.345	-11.203	7.336	1.00	0.00
ATOM	422	C	LYS	26	-4.318	-5.750	10.973	1.00	0.00
ATOM	423	O	LYS	26	-5.496	-6.105	10.969	1.00	0.00
ATOM	424	N	SER	27	-3.724	-5.203	12.029	1.00	0.00
ATOM	425	HN	SER	27	-2.783	-4.928	11.957	1.00	0.00
ATOM	426	CA	SER	27	-4.437	-4.970	13.281	1.00	0.00
ATOM	427	HA	SER	27	-5.407	-5.436	13.209	1.00	0.00
ATOM	428	CB	SER	27	-3.669	-5.585	14.452	1.00	0.00
ATOM	429	HB1	SER	27	-2.861	-4.927	14.735	1.00	0.00
ATOM	430	HB2	SER	27	-3.267	-6.542	14.152	1.00	0.00
ATOM	431	OG	SER	27	-4.514	-5.777	15.573	1.00	0.00
ATOM	432	HG	SER	27	-5.402	-5.986	15.273	1.00	0.00
ATOM	433	C	SER	27	-4.643	-3.481	13.519	1.00	0.00
ATOM	434	O	SER	27	-4.887	-3.052	14.646	1.00	0.00
ATOM	435	N	HIS	28	-4.516	-2.692	12.457	1.00	0.00
ATOM	436	HN	HIS	28	-4.367	-3.088	11.578	1.00	0.00
ATOM	437	CA	HIS	28	-4.755	-1.267	12.552	1.00	0.00
ATOM	438	HA	HIS	28	-4.393	-0.936	13.515	1.00	0.00
ATOM	439	CB	HIS	28	-4.006	-0.512	11.456	1.00	0.00
ATOM	440	HB1	HIS	28	-2.948	-0.628	11.622	1.00	0.00
ATOM	441	HB2	HIS	28	-4.266	-0.930	10.496	1.00	0.00
ATOM	442	CG	HIS	28	-4.292	0.956	11.417	1.00	0.00
ATOM	443	ND1	HIS	28	-4.264	1.759	12.538	1.00	0.00
ATOM	444	HD1	HIS	28	-4.083	1.459	13.454	1.00	0.00
ATOM	445	CD2	HIS	28	-4.569	1.777	10.377	1.00	0.00
ATOM	446	HD2	HIS	28	-4.665	1.487	9.340	1.00	0.00
ATOM	447	CE1	HIS	28	-4.533	3.006	12.191	1.00	0.00
ATOM	448	HE1	HIS	28	-4.587	3.852	12.859	1.00	0.00
ATOM	449	NE2	HIS	28	-4.719	3.042	10.886	1.00	0.00
ATOM	450	HE2	HIS	28	-4.935	3.844	10.367	1.00	0.00
ATOM	451	C	HIS	28	-6.246	-1.009	12.480	1.00	0.00
ATOM	452	O	HIS	28	-6.982	-1.724	11.800	1.00	0.00
ATOM	453	N	GLN	29	-6.690	-0.037	13.241	1.00	0.00
ATOM	454	HN	GLN	29	-6.048	0.472	13.779	1.00	0.00
ATOM	455	CA	GLN	29	-8.109	0.272	13.334	1.00	0.00
ATOM	456	HA	GLN	29	-8.640	-0.668	13.358	1.00	0.00
ATOM	457	CB	GLN	29	-8.371	1.007	14.638	1.00	0.00
ATOM	458	HB1	GLN	29	-9.433	1.018	14.832	1.00	0.00
ATOM	459	HB2	GLN	29	-8.012	2.021	14.552	1.00	0.00
ATOM	460	CG	GLN	29	-7.670	0.341	15.809	1.00	0.00
ATOM	461	HG1	GLN	29	-7.180	-0.560	15.445	1.00	0.00
ATOM	462	HG2	GLN	29	-6.929	1.021	16.203	1.00	0.00
ATOM	463	CD	GLN	29	-8.622	-0.040	16.925	1.00	0.00
ATOM	464	OE1	GLN	29	-8.364	0.234	18.097	1.00	0.00
ATOM	465	NE2	GLN	29	-9.730	-0.676	16.566	1.00	0.00
ATOM	466	HE21	GLN	29	-9.870	-0.861	15.613	1.00	0.00
ATOM	467	HE22	GLN	29	-10.363	-0.935	17.267	1.00	0.00
ATOM	468	C	GLN	29	-8.607	1.069	12.132	1.00	0.00
ATOM	469	O	GLN	29	-9.794	1.378	12.034	1.00	0.00
ATOM	470	N	SER	30	-7.711	1.348	11.191	1.00	0.00
ATOM	471	HN	SER	30	-6.785	1.056	11.306	1.00	0.00
ATOM	472	CA	SER	30	-8.082	2.036	9.965	1.00	0.00
ATOM	473	HA	SER	30	-9.149	2.199	9.989	1.00	0.00
ATOM	474	CB	SER	30	-7.375	3.385	9.874	1.00	0.00
ATOM	475	HB1	SER	30	-6.453	3.269	9.324	1.00	0.00
ATOM	476	HB2	SER	30	-8.013	4.090	9.362	1.00	0.00
ATOM	477	OG	SER	30	-7.079	3.891	11.163	1.00	0.00
ATOM	478	HG	SER	30	-7.871	3.870	11.705	1.00	0.00
ATOM	479	C	SER	30	-7.743	1.184	8.740	1.00	0.00
ATOM	480	O	SER	30	-8.056	1.562	7.611	1.00	0.00
ATOM	481	N	ALA	31	-7.089	0.039	8.962	1.00	0.00
ATOM	482	HN	ALA	31	-6.867	-0.224	9.880	1.00	0.00
ATOM	483	CA	ALA	31	-6.726	-0.855	7.868	1.00	0.00
ATOM	484	HA	ALA	31	-6.413	-0.246	7.034	1.00	0.00
ATOM	485	CB	ALA	31	-5.553	-1.732	8.272	1.00	0.00
ATOM	486	HB1	ALA	31	-5.218	-2.301	7.417	1.00	0.00
ATOM	487	HB2	ALA	31	-5.865	-2.407	9.054	1.00	0.00
ATOM	488	HB3	ALA	31	-4.746	-1.111	8.629	1.00	0.00
ATOM	489	C	ALA	31	-7.906	-1.726	7.433	1.00	0.00
ATOM	490	O	ALA	31	-7.795	-2.496	6.480	1.00	0.00
ATOM	491	N	TRP	32	-9.040	-1.590	8.119	1.00	0.00
ATOM	492	HN	TRP	32	-9.072	-0.974	8.879	1.00	0.00
ATOM	493	CA	TRP	32	-10.222	-2.384	7.799	1.00	0.00
ATOM	494	HA	TRP	32	-9.960	-3.416	7.971	1.00	0.00
ATOM	495	CB	TRP	32	-11.389	-2.030	8.736	1.00	0.00
ATOM	496	HB1	TRP	32	-11.167	-2.390	9.730	1.00	0.00
ATOM	497	HB2	TRP	32	-12.289	-2.507	8.377	1.00	0.00
ATOM	498	CG	TRP	32	-11.644	-0.566	8.823	1.00	0.00
ATOM	499	CD1	TRP	32	-11.330	0.268	9.857	1.00	0.00
ATOM	500	HD1	TRP	32	-10.862	-0.052	10.776	1.00	0.00
ATOM	501	CD2	TRP	32	-12.255	0.241	7.823	1.00	0.00
ATOM	502	NE1	TRP	32	-11.699	1.554	9.549	1.00	0.00
ATOM	503	HE1	TRP	32	-11.582	2.335	10.128	1.00	0.00
ATOM	504	CE2	TRP	32	-12.259	1.564	8.298	1.00	0.00
ATOM	505	CE3	TRP	32	-12.759	-0.025	6.552	1.00	0.00
ATOM	506	HE3	TRP	32	-12.751	-1.026	6.146	1.00	0.00
ATOM	507	CZ2	TRP	32	-12.780	2.612	7.553	1.00	0.00
ATOM	508	HZ2	TRP	32	-12.798	3.627	7.923	1.00	0.00
ATOM	509	CZ3	TRP	32	-13.278	1.012	5.816	1.00	0.00
ATOM	510	HZ3	TRP	32	-13.671	0.827	4.829	1.00	0.00
ATOM	511	CH2	TRP	32	-13.284	2.314	6.317	1.00	0.00
ATOM	512	HH2	TRP	32	-13.669	3.090	5.697	1.00	0.00
ATOM	513	C	TRP	32	-10.647	-2.251	6.323	1.00	0.00
ATOM	514	O	TRP	32	-11.197	-3.202	5.769	1.00	0.00
ATOM	515	N	PRO	33	-10.400	-1.102	5.633	1.00	0.00
ATOM	516	CA	PRO	33	-10.776	-0.964	4.229	1.00	0.00
ATOM	517	HA	PRO	33	-11.746	-1.400	4.038	1.00	0.00
ATOM	518	CB	PRO	33	-10.842	0.550	3.996	1.00	0.00
ATOM	519	HB1	PRO	33	-10.273	0.798	3.113	1.00	0.00
ATOM	520	HB2	PRO	33	-11.870	0.844	3.852	1.00	0.00
ATOM	521	CG	PRO	33	-10.257	1.205	5.213	1.00	0.00
ATOM	522	HG1	PRO	33	-9.438	1.839	4.913	1.00	0.00
ATOM	523	HG2	PRO	33	-11.008	1.791	5.713	1.00	0.00
ATOM	524	CD	PRO	33	-9.749	0.125	6.125	1.00	0.00
ATOM	525	HD1	PRO	33	-8.693	0.063	6.031	1.00	0.00
ATOM	526	HD2	PRO	33	-10.014	0.330	7.146	1.00	0.00
ATOM	527	C	PRO	33	-9.748	-1.604	3.299	1.00	0.00
ATOM	528	O	PRO	33	-10.097	-2.161	2.259	1.00	0.00
ATOM	529	N	PHE	34	-8.481	-1.522	3.688	1.00	0.00
ATOM	530	HN	PHE	34	-8.271	-1.075	4.533	1.00	0.00
ATOM	531	CA	PHE	34	-7.393	-2.109	2.910	1.00	0.00
ATOM	532	HA	PHE	34	-7.546	-1.870	1.872	1.00	0.00
ATOM	533	CB	PHE	34	-6.043	-1.529	3.344	1.00	0.00
ATOM	534	HB1	PHE	34	-5.395	-1.497	2.486	1.00	0.00
ATOM	535	HB2	PHE	34	-5.608	-2.168	4.098	1.00	0.00
ATOM	536	CG	PHE	34	-6.120	-0.134	3.900	1.00	0.00

REPLACEMENT SHEET

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ATOM    537  CD1 PHE  34      -6.997   0.794   3.361  1.00  0.00
ATOM    538  HD1 PHE  34      -7.638   0.503   2.542  1.00  0.00
ATOM    539  CD2 PHE  34      -5.300   0.255   4.946  1.00  0.00
ATOM    540  HD2 PHE  34      -4.611  -0.459   5.373  1.00  0.00
ATOM    541  CE1 PHE  34      -7.069   2.077   3.868  1.00  0.00
ATOM    542  HE1 PHE  34      -7.761   2.789   3.443  1.00  0.00
ATOM    543  CE2 PHE  34      -5.368   1.536   5.459  1.00  0.00
ATOM    544  HE2 PHE  34      -4.728   1.824   6.279  1.00  0.00
ATOM    545  CZ  PHE  34      -6.252   2.450   4.917  1.00  0.00
ATOM    546  HZ  PHE  34      -6.304   3.453   5.314  1.00  0.00
ATOM    547  C   PHE  34      -7.400  -3.624   3.053  1.00  0.00
ATOM    548  O   PHE  34      -7.293  -4.349   2.065  1.00  0.00
ATOM    549  N   MET  35      -7.543  -4.100   4.285  1.00  0.00
ATOM    550  HN  MET  35      -7.635  -3.476   5.035  1.00  0.00
ATOM    551  CA  MET  35      -7.587  -5.534   4.541  1.00  0.00
ATOM    552  HA  MET  35      -6.624  -5.948   4.283  1.00  0.00
ATOM    553  CB  MET  35      -7.868  -5.802   6.021  1.00  0.00
ATOM    554  HB1 MET  35      -8.472  -4.998   6.413  1.00  0.00
ATOM    555  HB2 MET  35      -8.415  -6.729   6.110  1.00  0.00
ATOM    556  CG  MET  35      -6.609  -5.910   6.868  1.00  0.00
ATOM    557  HG1 MET  35      -6.714  -5.267   7.730  1.00  0.00
ATOM    558  HG2 MET  35      -5.766  -5.582   6.278  1.00  0.00
ATOM    559  SD  MET  35      -6.296  -7.591   7.437  1.00  0.00
ATOM    560  CE  MET  35      -4.848  -8.011   6.470  1.00  0.00
ATOM    561  HE1 MET  35      -4.248  -8.726   7.013  1.00  0.00
ATOM    562  HE2 MET  35      -4.268  -7.119   6.285  1.00  0.00
ATOM    563  HE3 MET  35      -5.157  -8.441   5.529  1.00  0.00
ATOM    564  C   MET  35      -8.656  -6.194   3.674  1.00  0.00
ATOM    565  O   MET  35      -9.847  -5.924   3.827  1.00  0.00
ATOM    566  N   GLU  36      -8.219  -7.049   2.751  1.00  0.00
ATOM    567  HN  GLU  36      -7.255  -7.208   2.671  1.00  0.00
ATOM    568  CA  GLU  36      -9.128  -7.729   1.829  1.00  0.00
ATOM    569  HA  GLU  36      -8.598  -8.569   1.409  1.00  0.00
ATOM    570  CB  GLU  36     -10.371  -8.248   2.562  1.00  0.00
ATOM    571  HB1 GLU  36     -11.151  -7.504   2.496  1.00  0.00
ATOM    572  HB2 GLU  36     -10.122  -8.406   3.601  1.00  0.00
ATOM    573  CG  GLU  36     -10.907  -9.553   1.996  1.00  0.00
ATOM    574  HG1 GLU  36     -10.073 -10.192   1.748  1.00  0.00
ATOM    575  HG2 GLU  36     -11.473  -9.338   1.102  1.00  0.00
ATOM    576  CD  GLU  36     -11.806 -10.289   2.972  1.00  0.00
ATOM    577  OE1 GLU  36     -11.522 -11.469   3.266  1.00  0.00
ATOM    578  OE2 GLU  36     -12.794  -9.685   3.440  1.00  0.00
ATOM    579  C   GLU  36      -9.543  -6.792   0.696  1.00  0.00
ATOM    580  O   GLU  36     -10.414  -5.939   0.873  1.00  0.00
ATOM    581  N   PRO  37      -8.913  -6.929  -0.486  1.00  0.00
ATOM    582  CA  PRO  37      -9.200  -6.075  -1.644  1.00  0.00
ATOM    583  HA  PRO  37      -9.135  -5.029  -1.386  1.00  0.00
ATOM    584  CB  PRO  37      -8.087  -6.425  -2.646  1.00  0.00
ATOM    585  HB1 PRO  37      -7.650  -5.515  -3.031  1.00  0.00
ATOM    586  HB2 PRO  37      -8.504  -6.999  -3.461  1.00  0.00
ATOM    587  CG  PRO  37      -7.087  -7.224  -1.876  1.00  0.00
ATOM    588  HG1 PRO  37      -6.627  -7.957  -2.522  1.00  0.00
ATOM    589  HG2 PRO  37      -6.338  -6.570  -1.455  1.00  0.00
ATOM    590  CD  PRO  37      -7.857  -7.906  -0.784  1.00  0.00
ATOM    591  HD1 PRO  37      -7.229  -8.071   0.077  1.00  0.00
ATOM    592  HD2 PRO  37      -8.276  -8.834  -1.137  1.00  0.00
ATOM    593  C   PRO  37     -10.569  -6.357  -2.254  1.00  0.00
ATOM    594  O   PRO  37     -11.467  -6.866  -1.584  1.00  0.00
ATOM    595  N   VAL  38     -10.720  -6.015  -3.531  1.00  0.00
ATOM    596  HN  VAL  38      -9.967  -5.610  -4.008  1.00  0.00
ATOM    597  CA  VAL  38     -11.979  -6.221  -4.237  1.00  0.00
ATOM    598  HA  VAL  38     -12.777  -5.845  -3.614  1.00  0.00
ATOM    599  CB  VAL  38     -12.006  -5.450  -5.571  1.00  0.00
ATOM    600  HB  VAL  38     -11.238  -5.856  -6.213  1.00  0.00
ATOM    601  CG1 VAL  38     -11.704  -3.977  -5.342  1.00  0.00
ATOM    602 HG11 VAL  38     -12.002  -3.410  -6.212  1.00  0.00
ATOM    603 HG12 VAL  38     -10.645  -3.848  -5.174  1.00  0.00
ATOM    604 HG13 VAL  38     -12.250  -3.628  -4.479  1.00  0.00
ATOM    605  CG2 VAL  38     -13.347  -5.625  -6.266  1.00  0.00
ATOM    606 HG21 VAL  38     -13.431  -6.636  -6.639  1.00  0.00
ATOM    607 HG22 VAL  38     -13.419  -4.931  -7.090  1.00  0.00
ATOM    608 HG23 VAL  38     -14.145  -5.434  -5.563  1.00  0.00
ATOM    609  C   VAL  38     -12.222  -7.700  -4.513  1.00  0.00
ATOM    610  O   VAL  38     -11.293  -8.508  -4.492  1.00  0.00
ATOM    611  N   LYS  39     -13.477  -8.047  -4.775  1.00  0.00
ATOM    612  HN  LYS  39     -14.173  -7.357  -4.773  1.00  0.00
ATOM    613  CA  LYS  39     -13.850  -9.431  -5.053  1.00  0.00
ATOM    614  HA  LYS  39     -12.960 -10.036  -4.968  1.00  0.00
ATOM    615  CB  LYS  39     -14.898  -9.939  -4.047  1.00  0.00
ATOM    616  HB1 LYS  39     -15.855  -9.996  -4.546  1.00  0.00
ATOM    617  HB2 LYS  39     -14.615 -10.931  -3.727  1.00  0.00
ATOM    618  CG  LYS  39     -15.065  -9.072  -2.804  1.00  0.00
ATOM    619  HG1 LYS  39     -14.989  -8.033  -3.086  1.00  0.00
ATOM    620  HG2 LYS  39     -14.283  -9.315  -2.099  1.00  0.00
ATOM    621  CD  LYS  39     -16.414  -9.301  -2.144  1.00  0.00
ATOM    622  HD1 LYS  39     -17.168  -8.758  -2.693  1.00  0.00
ATOM    623  HD2 LYS  39     -16.640 -10.357  -2.164  1.00  0.00
ATOM    624  CE  LYS  39     -16.415  -8.824  -0.701  1.00  0.00
ATOM    625  HE1 LYS  39     -16.995  -9.516  -0.107  1.00  0.00
ATOM    626  HE2 LYS  39     -15.398  -8.806  -0.340  1.00  0.00
ATOM    627  NZ  LYS  39     -17.002  -7.462  -0.567  1.00  0.00
ATOM    628  HZ1 LYS  39     -17.552  -7.225  -1.417  1.00  0.00
ATOM    629  HZ2 LYS  39     -16.246  -6.758  -0.448  1.00  0.00
ATOM    630  HZ3 LYS  39     -17.630  -7.423   0.261  1.00  0.00
ATOM    631  C   LYS  39     -14.399  -9.563  -6.469  1.00  0.00
ATOM    632  O   LYS  39     -13.886 -10.337  -7.278  1.00  0.00
ATOM    633  N   ARG  40     -15.448  -8.801  -6.759  1.00  0.00
ATOM    634  HN  ARG  40     -15.810  -8.206  -6.070  1.00  0.00
ATOM    635  CA  ARG  40     -16.078  -8.826  -8.074  1.00  0.00
ATOM    636  HA  ARG  40     -15.347  -8.504  -8.800  1.00  0.00
ATOM    637  CB  ARG  40     -16.534 -10.246  -8.417  1.00  0.00
ATOM    638  HB1 ARG  40     -15.676 -10.822  -8.729  1.00  0.00
ATOM    639  HB2 ARG  40     -17.240 -10.197  -9.234  1.00  0.00
ATOM    640  CG  ARG  40     -17.198 -10.968  -7.256  1.00  0.00
ATOM    641  HG1 ARG  40     -18.190 -10.565  -7.115  1.00  0.00
ATOM    642  HG2 ARG  40     -16.612 -10.809  -6.363  1.00  0.00
ATOM    643  CD  ARG  40     -17.305 -12.462  -7.516  1.00  0.00
ATOM    644  HD1 ARG  40     -16.418 -12.788  -8.038  1.00  0.00
ATOM    645  HD2 ARG  40     -18.173 -12.645  -8.133  1.00  0.00
ATOM    646  NE  ARG  40     -17.434 -13.225  -6.277  1.00  0.00
ATOM    647  HE  ARG  40     -17.683 -12.735  -5.466  1.00  0.00
ATOM    648  CZ  ARG  40     -17.235 -14.537  -6.197  1.00  0.00
ATOM    649  NH1 ARG  40     -16.898 -15.225  -7.279  1.00  0.00
ATOM    650 HH11 ARG  40     -16.794 -14.758  -8.157  1.00  0.00
ATOM    651 HH12 ARG  40     -16.748 -16.212  -7.217  1.00  0.00
ATOM    652  NH2 ARG  40     -17.371 -15.160  -5.034  1.00  0.00
ATOM    653 HH21 ARG  40     -17.624 -14.644  -4.216  1.00  0.00
ATOM    654 HH22 ARG  40     -17.220 -16.147  -4.976  1.00  0.00
ATOM    655  C   ARG  40     -17.268  -7.874  -8.116  1.00  0.00
ATOM    656  O   ARG  40     -17.442  -7.122  -9.074  1.00  0.00
ATOM    657  N   THR  41     -18.081  -7.910  -7.065  1.00  0.00
ATOM    658  HN  THR  41     -17.886  -8.530  -6.332  1.00  0.00
ATOM    659  CA  THR  41     -19.252  -7.047  -6.971  1.00  0.00
ATOM    660  HA  THR  41     -19.528  -6.751  -7.973  1.00  0.00
ATOM    661  CB  THR  41     -20.418  -7.806  -6.335  1.00  0.00
ATOM    662  HB  THR  41     -20.623  -8.689  -6.922  1.00  0.00
ATOM    663  OG1 THR  41     -21.586  -7.003  -6.313  1.00  0.00
ATOM    664  HG1 THR  41     -21.499  -6.331  -5.634  1.00  0.00
ATOM    665  CG2 THR  41     -20.139  -8.252  -4.916  1.00  0.00
ATOM    666 HG21 THR  41     -19.793  -7.409  -4.335  1.00  0.00
ATOM    667 HG22 THR  41     -19.381  -9.020  -4.923  1.00  0.00
ATOM    668 HG23 THR  41     -21.045  -8.644  -4.477  1.00  0.00
ATOM    669  C   THR  41     -18.940  -5.797  -6.155  1.00  0.00
ATOM    670  O   THR  41     -19.562  -4.751  -6.338  1.00  0.00
ATOM    671  N   GLU  42     -17.969  -5.915  -5.254  1.00  0.00
ATOM    672  HN  GLU  42     -17.511  -6.776  -5.156  1.00  0.00
ATOM    673  CA  GLU  42     -17.570  -4.797  -4.408  1.00  0.00
ATOM    674  HA  GLU  42     -18.437  -4.480  -3.847  1.00  0.00
ATOM    675  CB  GLU  42     -16.478  -5.238  -3.432  1.00  0.00
ATOM    676  HB1 GLU  42     -15.513  -5.015  -3.864  1.00  0.00
ATOM    677  HB2 GLU  42     -16.556  -6.304  -3.279  1.00  0.00
ATOM    678  CG  GLU  42     -16.561  -4.556  -2.076  1.00  0.00
ATOM    679  HG1 GLU  42     -17.313  -5.054  -1.482  1.00  0.00
ATOM    680  HG2 GLU  42     -16.845  -3.524  -2.224  1.00  0.00
ATOM    681  CD  GLU  42     -15.246  -4.592  -1.323  1.00  0.00
ATOM    682  OE1 GLU  42     -14.293  -3.913  -1.760  1.00  0.00
ATOM    683  OE2 GLU  42     -15.169  -5.300  -0.297  1.00  0.00
ATOM    684  C   GLU  42     -17.072  -3.626  -5.249  1.00  0.00
ATOM    685  O   GLU  42     -17.374  -2.468  -4.959  1.00  0.00
ATOM    686  N   ALA  43     -16.304  -3.935  -6.288  1.00  0.00
ATOM    687  HN  ALA  43     -16.098  -4.877  -6.467  1.00  0.00
ATOM    688  CA  ALA  43     -15.762  -2.908  -7.171  1.00  0.00
ATOM    689  HA  ALA  43     -16.392  -2.035  -7.091  1.00  0.00
ATOM    690  CB  ALA  43     -14.359  -2.518  -6.730  1.00  0.00
ATOM    691  HB1 ALA  43     -14.122  -3.016  -5.801  1.00  0.00
ATOM    692  HB2 ALA  43     -14.310  -1.449  -6.587  1.00  0.00
ATOM    693  HB3 ALA  43     -13.648  -2.813  -7.487  1.00  0.00
ATOM    694  C   ALA  43     -15.753  -3.381  -8.623  1.00  0.00
ATOM    695  O   ALA  43     -14.707  -3.745  -9.159  1.00  0.00
ATOM    696  N   PRO  44     -16.925  -3.378  -9.280  1.00  0.00
ATOM    697  CA  PRO  44     -17.051  -3.815 -10.673  1.00  0.00
ATOM    698  HA  PRO  44     -16.545  -4.754 -10.841  1.00  0.00
ATOM    699  CB  PRO  44     -18.558  -4.006 -10.840  1.00  0.00
ATOM    700  HB1 PRO  44     -18.842  -3.787 -11.859  1.00  0.00
ATOM    701  HB2 PRO  44     -18.824  -5.024 -10.597  1.00  0.00
ATOM    702  CG  PRO  44     -19.165  -3.039  -9.884  1.00  0.00
ATOM    703  HG1 PRO  44     -19.259  -2.070 -10.352  1.00  0.00
ATOM    704  HG2 PRO  44     -20.133  -3.397  -9.564  1.00  0.00
ATOM    705  CD  PRO  44     -18.224  -2.963  -8.711  1.00  0.00
ATOM    706  HD1 PRO  44     -18.173  -1.953  -8.334  1.00  0.00
ATOM    707  HD2 PRO  44     -18.537  -3.642  -7.932  1.00  0.00
ATOM    708  C   PRO  44     -16.532  -2.775 -11.662  1.00  0.00
ATOM    709  O   PRO  44     -16.263  -3.090 -12.821  1.00  0.00
ATOM    710  N   GLY  45     -16.394  -1.536 -11.208  1.00  0.00
ATOM    711  HN  GLY  45     -16.627  -1.340 -10.268  1.00  0.00
ATOM    712  CA  GLY  45     -15.915  -0.473 -12.064  1.00  0.00
ATOM    713  HA1 GLY  45     -15.960  -0.810 -13.089  1.00  0.00
ATOM    714  HA2 GLY  45     -16.560   0.385 -11.950  1.00  0.00
ATOM    715  C   GLY  45     -14.491  -0.059 -11.747  1.00  0.00
ATOM    716  O   GLY  45     -14.134   1.111 -11.883  1.00  0.00
ATOM    717  N   TYR  46     -13.676  -1.020 -11.327  1.00  0.00
ATOM    718  HN  TYR  46     -14.018  -1.934 -11.241  1.00  0.00
ATOM    719  CA  TYR  46     -12.282  -0.748 -10.995  1.00  0.00
ATOM    720  HA  TYR  46     -12.243   0.205 -10.488  1.00  0.00
ATOM    721  CB  TYR  46     -11.739  -1.832 -10.062  1.00  0.00
ATOM    722  HB1 TYR  46     -10.765  -2.142 -10.411  1.00  0.00
ATOM    723  HB2 TYR  46     -12.408  -2.680 -10.078  1.00  0.00
ATOM    724  CG  TYR  46     -11.595  -1.382  -8.625  1.00  0.00
ATOM    725  CD1 TYR  46     -10.623  -1.931  -7.799  1.00  0.00
ATOM    726  HD1 TYR  46      -9.964  -2.690  -8.196  1.00  0.00
ATOM    727  CD2 TYR  46     -12.432  -0.408  -8.095  1.00  0.00
ATOM    728  HD2 TYR  46     -13.194   0.029  -8.724  1.00  0.00
ATOM    729  CE1 TYR  46     -10.487  -1.522  -6.486  1.00  0.00
ATOM    730  HE1 TYR  46      -9.725  -1.960  -5.859  1.00  0.00
ATOM    731  CE2 TYR  46     -12.303   0.007  -6.783  1.00  0.00
ATOM    732  HE2 TYR  46     -12.964   0.766  -6.389  1.00  0.00
ATOM    733  CZ  TYR  46     -11.330  -0.553  -5.983  1.00  0.00
ATOM    734  OH  TYR  46     -11.199  -0.143  -4.676  1.00  0.00
ATOM    735  HH  TYR  46     -10.892  -0.877  -4.139  1.00  0.00
ATOM    736  C   TYR  46     -11.427  -0.671 -12.256  1.00  0.00
ATOM    737  O   TYR  46     -11.940  -0.764 -13.371  1.00  0.00
ATOM    738  N   TYR  47     -10.120  -0.506 -12.072  1.00  0.00
ATOM    739  HN  TYR  47      -9.772  -0.440 -11.159  1.00  0.00
ATOM    740  CA  TYR  47      -9.189  -0.421 -13.195  1.00  0.00
ATOM    741  HA  TYR  47      -8.188  -0.506 -12.800  1.00  0.00
ATOM    742  CB  TYR  47      -9.433  -1.567 -14.181  1.00  0.00
ATOM    743  HB1 TYR  47     -10.224  -1.285 -14.860  1.00  0.00
ATOM    744  HB2 TYR  47      -8.529  -1.748 -14.743  1.00  0.00
ATOM    745  CG  TYR  47      -9.833  -2.862 -13.514  1.00  0.00
ATOM    746  CD1 TYR  47     -10.756  -3.715 -14.105  1.00  0.00
ATOM    747  HD1 TYR  47     -11.188  -3.443 -15.057  1.00  0.00
ATOM    748  CD2 TYR  47      -9.290  -3.229 -12.290  1.00  0.00
ATOM    749  HD2 TYR  47      -8.572  -2.574 -11.818  1.00  0.00
ATOM    750  CE1 TYR  47     -11.124  -4.899 -13.496  1.00  0.00
ATOM    751  HE1 TYR  47     -11.843  -5.550 -13.971  1.00  0.00
ATOM    752  CE2 TYR  47      -9.653  -4.411 -11.674  1.00  0.00
ATOM    753  HE2 TYR  47      -9.219  -4.679 -10.722  1.00  0.00
ATOM    754  CZ  TYR  47     -10.570  -5.242 -12.280  1.00  0.00
ATOM    755  OH  TYR  47     -10.934  -6.421 -11.671  1.00  0.00
ATOM    756  HH  TYR  47     -10.153  -6.958 -11.519  1.00  0.00
ATOM    757  C   TYR  47      -9.318   0.917 -13.916  1.00  0.00
ATOM    758  O   TYR  47      -8.360   1.686 -13.992  1.00  0.00
ATOM    759  N   GLU  48     -10.504   1.184 -14.451  1.00  0.00
ATOM    760  HN  GLU  48     -11.227   0.529 -14.362  1.00  0.00
ATOM    761  CA  GLU  48     -10.754   2.425 -15.175  1.00  0.00
ATOM    762  HA  GLU  48     -10.103   2.441 -16.037  1.00  0.00
ATOM    763  CB  GLU  48     -12.209   2.478 -15.648  1.00  0.00
ATOM    764  HB1 GLU  48     -12.854   2.529 -14.784  1.00  0.00
ATOM    765  HB2 GLU  48     -12.349   3.368 -16.244  1.00  0.00
ATOM    766  CG  GLU  48     -12.621   1.276 -16.482  1.00  0.00
ATOM    767  HG1 GLU  48     -12.135   1.337 -17.444  1.00  0.00
ATOM    768  HG2 GLU  48     -12.304   0.376 -15.976  1.00  0.00
ATOM    769  CD  GLU  48     -14.120   1.204 -16.702  1.00  0.00
ATOM    770  OE1 GLU  48     -14.858   1.919 -15.994  1.00  0.00
ATOM    771  OE2 GLU  48     -14.554   0.433 -17.584  1.00  0.00
ATOM    772  C   GLU  48     -10.445   3.639 -14.306  1.00  0.00
ATOM    773  O   GLU  48     -10.136   4.716 -14.815  1.00  0.00
ATOM    774  N   VAL  49     -10.529   3.459 -12.992  1.00  0.00
ATOM    775  HN  VAL  49     -10.781   2.578 -12.644  1.00  0.00
ATOM    776  CA  VAL  49     -10.261   4.545 -12.055  1.00  0.00
ATOM    777  HA  VAL  49      -9.905   5.392 -12.624  1.00  0.00
ATOM    778  CB  VAL  49     -11.542   4.971 -11.313  1.00  0.00
ATOM    779  HB  VAL  49     -12.308   5.171 -12.047  1.00  0.00
ATOM    780  CG1 VAL  49     -12.033   3.853 -10.407  1.00  0.00
ATOM    781 HG11 VAL  49     -11.630   3.991  -9.414  1.00  0.00
ATOM    782 HG12 VAL  49     -11.705   2.901 -10.799  1.00  0.00
ATOM    783 HG13 VAL  49     -13.112   3.872 -10.364  1.00  0.00
ATOM    784  CG2 VAL  49     -11.301   6.246 -10.518  1.00  0.00
ATOM    785 HG21 VAL  49     -10.706   6.020  -9.646  1.00  0.00
ATOM    786 HG22 VAL  49     -12.249   6.661 -10.209  1.00  0.00
ATOM    787 HG23 VAL  49     -10.779   6.963 -11.135  1.00  0.00
ATOM    788  C   VAL  49      -9.195   4.160 -11.026  1.00  0.00
ATOM    789  O   VAL  49      -8.861   4.956 -10.148  1.00  0.00
ATOM    790  N   ILE  50      -8.665   2.941 -11.130  1.00  0.00
ATOM    791  HN  ILE  50      -8.958   2.347 -11.847  1.00  0.00
ATOM    792  CA  ILE  50      -7.644   2.474 -10.204  1.00  0.00
ATOM    793  HA  ILE  50      -7.342   3.309  -9.589  1.00  0.00
ATOM    794  CB  ILE  50      -8.182   1.365  -9.282  1.00  0.00
ATOM    795  HB  ILE  50      -8.267   0.458  -9.861  1.00  0.00
ATOM    796  CG1 ILE  50      -9.559   1.747  -8.737  1.00  0.00
ATOM    797 HG11 ILE  50     -10.222   1.952  -9.564  1.00  0.00
ATOM    798 HG12 ILE  50      -9.952   0.921  -8.162  1.00  0.00
ATOM    799  CG2 ILE  50      -7.210   1.105  -8.142  1.00  0.00
ATOM    800 HG21 ILE  50      -6.248   1.528  -8.387  1.00  0.00
ATOM    801 HG22 ILE  50      -7.108   0.041  -7.991  1.00  0.00
ATOM    802 HG23 ILE  50      -7.586   1.561  -7.238  1.00  0.00
ATOM    803  CD1 ILE  50      -9.540   2.967  -7.843  1.00  0.00
ATOM    804 HD11 ILE  50      -9.670   3.855  -8.443  1.00  0.00
ATOM    805 HD12 ILE  50      -8.593   3.015  -7.325  1.00  0.00
ATOM    806 HD13 ILE  50     -10.341   2.898  -7.123  1.00  0.00
ATOM    807  C   ILE  50      -6.428   1.945 -10.953  1.00  0.00
ATOM    808  O   ILE  50      -6.557   1.228 -11.945  1.00  0.00
ATOM    809  N   ARG  51      -5.248   2.301 -10.466  1.00  0.00
ATOM    810  HN  ARG  51      -5.216   2.877  -9.676  1.00  0.00
ATOM    811  CA  ARG  51      -4.000   1.873 -11.085  1.00  0.00
ATOM    812  HA  ARG  51      -4.014   2.198 -12.114  1.00  0.00
ATOM    813  CB  ARG  51      -2.811   2.519 -10.373  1.00  0.00
ATOM    814  HB1 ARG  51      -3.181   3.123  -9.557  1.00  0.00
ATOM    815  HB2 ARG  51      -2.177   1.740  -9.975  1.00  0.00
ATOM    816  CG  ARG  51      -1.967   3.403 -11.277  1.00  0.00
ATOM    817  HG1 ARG  51      -2.041   3.037 -12.291  1.00  0.00
ATOM    818  HG2 ARG  51      -0.939   3.358 -10.950  1.00  0.00
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REPLACEMENT SHEET

ATOM	819	CD	ARG	51	-2.433	4.849	-11.240	1.00	0.00
ATOM	820	HD1	ARG	51	-2.996	5.010	-10.332	1.00	0.00
ATOM	821	HD2	ARG	51	-1.566	5.493	-11.244	1.00	0.00
ATOM	822	NE	ARG	51	-3.275	5.184	-12.385	1.00	0.00
ATOM	823	HE	ARG	51	-4.217	5.390	-12.212	1.00	0.00
ATOM	824	CZ	ARG	51	-2.832	5.226	-13.638	1.00	0.00
ATOM	825	NH1	ARG	51	-1.562	4.953	-13.904	1.00	0.00
ATOM	826	HH11	ARG	51	-1.231	4.984	-14.846	1.00	0.00
ATOM	827	HH12	ARG	51	-0.936	4.716	-13.161	1.00	0.00
ATOM	828	NH2	ARG	51	-3.659	5.539	-14.626	1.00	0.00
ATOM	829	HH21	ARG	51	-3.323	5.569	-15.568	1.00	0.00
ATOM	830	HH22	ARG	51	-4.617	5.746	-14.430	1.00	0.00
ATOM	831	C	ARG	51	-3.864	0.354	-11.056	1.00	0.00
ATOM	832	O	ARG	51	-4.094	-0.319	-12.061	1.00	0.00
ATOM	833	N	SER	52	-3.479	-0.182	-9.901	1.00	0.00
ATOM	834	HN	SER	52	-3.310	0.403	-9.134	1.00	0.00
ATOM	835	CA	SER	52	-3.307	-1.622	-9.751	1.00	0.00
ATOM	836	HA	SER	52	-3.766	-2.101	-10.603	1.00	0.00
ATOM	837	CB	SER	52	-1.820	-1.980	-9.715	1.00	0.00
ATOM	838	HB1	SER	52	-1.690	-3.005	-10.027	1.00	0.00
ATOM	839	HB2	SER	52	-1.447	-1.860	-8.708	1.00	0.00
ATOM	840	OG	SER	52	-1.072	-1.143	-10.580	1.00	0.00
ATOM	841	HG	SER	52	-0.287	-1.608	-10.877	1.00	0.00
ATOM	842	C	SER	52	-3.993	-2.128	-8.488	1.00	0.00
ATOM	843	O	SER	52	-3.353	-2.308	-7.452	1.00	0.00
ATOM	844	N	PRO	53	-5.310	-2.379	-8.565	1.00	0.00
ATOM	845	CA	PRO	53	-6.087	-2.882	-7.435	1.00	0.00
ATOM	846	HA	PRO	53	-6.390	-2.083	-6.773	1.00	0.00
ATOM	847	CB	PRO	53	-7.313	-3.484	-8.111	1.00	0.00
ATOM	848	HB1	PRO	53	-8.160	-3.415	-7.450	1.00	0.00
ATOM	849	HB2	PRO	53	-7.122	-4.519	-8.355	1.00	0.00
ATOM	850	CG	PRO	53	-7.512	-2.661	-9.337	1.00	0.00
ATOM	851	HG1	PRO	53	-7.963	-3.263	-10.110	1.00	0.00
ATOM	852	HG2	PRO	53	-8.139	-1.812	-9.109	1.00	0.00
ATOM	853	CD	PRO	53	-6.145	-2.197	-9.770	1.00	0.00
ATOM	854	HD1	PRO	53	-5.780	-2.805	-10.584	1.00	0.00
ATOM	855	HD2	PRO	53	-6.176	-1.157	-10.060	1.00	0.00
ATOM	856	C	PRO	53	-5.340	-3.947	-6.639	1.00	0.00
ATOM	857	O	PRO	53	-5.425	-5.137	-6.943	1.00	0.00
ATOM	858	N	MET	54	-4.609	-3.512	-5.619	1.00	0.00
ATOM	859	HN	MET	54	-4.581	-2.552	-5.426	1.00	0.00
ATOM	860	CA	MET	54	-3.850	-4.428	-4.777	1.00	0.00
ATOM	861	HA	MET	54	-4.303	-5.405	-4.859	1.00	0.00
ATOM	862	CB	MET	54	-2.398	-4.508	-5.253	1.00	0.00
ATOM	863	HB1	MET	54	-2.390	-4.624	-6.327	1.00	0.00
ATOM	864	HB2	MET	54	-1.897	-3.587	-4.995	1.00	0.00
ATOM	865	CG	MET	54	-1.615	-5.660	-4.644	1.00	0.00
ATOM	866	HG1	MET	54	-1.472	-5.464	-3.592	1.00	0.00
ATOM	867	HG2	MET	54	-0.653	-5.720	-5.132	1.00	0.00
ATOM	868	SD	MET	54	-2.452	-7.247	-4.826	1.00	0.00
ATOM	869	CE	MET	54	-3.383	-7.311	-3.298	1.00	0.00
ATOM	870	HE1	MET	54	-2.905	-7.997	-2.612	1.00	0.00
ATOM	871	HE2	MET	54	-4.388	-7.650	-3.501	1.00	0.00
ATOM	872	HE3	MET	54	-3.418	-6.327	-2.857	1.00	0.00
ATOM	873	C	MET	54	-3.897	-3.984	-3.320	1.00	0.00
ATOM	874	O	MET	54	-2.937	-3.415	-2.802	1.00	0.00
ATOM	875	N	ASP	55	-5.026	-4.240	-2.667	1.00	0.00
ATOM	876	HN	ASP	55	-5.755	-4.699	-3.134	1.00	0.00
ATOM	877	CA	ASP	55	-5.201	-3.870	-1.269	1.00	0.00
ATOM	878	HA	ASP	55	-4.803	-2.874	-1.139	1.00	0.00
ATOM	879	CB	ASP	55	-6.690	-3.863	-0.906	1.00	0.00
ATOM	880	HB1	ASP	55	-6.811	-3.495	0.102	1.00	0.00
ATOM	881	HB2	ASP	55	-7.075	-4.869	-0.964	1.00	0.00
ATOM	882	CG	ASP	55	-7.506	-2.985	-1.835	1.00	0.00
ATOM	883	OD1	ASP	55	-7.575	-3.302	-3.041	1.00	0.00
ATOM	884	OD2	ASP	55	-8.074	-1.981	-1.357	1.00	0.00
ATOM	885	C	ASP	55	-4.435	-4.826	-0.360	1.00	0.00
ATOM	886	O	ASP	55	-3.578	-5.580	-0.819	1.00	0.00
ATOM	887	N	LEU	56	-4.739	-4.786	0.931	1.00	0.00
ATOM	888	HN	LEU	56	-5.426	-4.163	1.242	1.00	0.00
ATOM	889	CA	LEU	56	-4.069	-5.644	1.898	1.00	0.00
ATOM	890	HA	LEU	56	-3.012	-5.620	1.683	1.00	0.00
ATOM	891	CB	LEU	56	-4.305	-5.115	3.318	1.00	0.00
ATOM	892	HB1	LEU	56	-4.223	-5.939	4.008	1.00	0.00
ATOM	893	HB2	LEU	56	-5.306	-4.729	3.371	1.00	0.00
ATOM	894	CG	LEU	56	-3.343	-4.015	3.770	1.00	0.00
ATOM	895	HG	LEU	56	-3.605	-3.702	4.770	1.00	0.00
ATOM	896	CD1	LEU	56	-3.425	-2.802	2.859	1.00	0.00
ATOM	897	HD11	LEU	56	-3.644	-1.924	3.449	1.00	0.00
ATOM	898	HD12	LEU	56	-4.204	-2.950	2.132	1.00	0.00
ATOM	899	HD13	LEU	56	-2.481	-2.668	2.352	1.00	0.00
ATOM	900	CD2	LEU	56	-1.929	-4.544	3.801	1.00	0.00
ATOM	901	HD21	LEU	56	-1.279	-3.850	3.291	1.00	0.00
ATOM	902	HD22	LEU	56	-1.898	-5.500	3.303	1.00	0.00
ATOM	903	HD23	LEU	56	-1.611	-4.656	4.824	1.00	0.00
ATOM	904	C	LEU	56	-4.568	-7.081	1.773	1.00	0.00
ATOM	905	O	LEU	56	-5.294	-7.404	0.835	1.00	0.00
ATOM	906	N	LYS	57	-4.152	-7.939	2.706	1.00	0.00
ATOM	907	HN	LYS	57	-3.564	-7.617	3.417	1.00	0.00
ATOM	908	CA	LYS	57	-4.555	-9.347	2.715	1.00	0.00
ATOM	909	HA	LYS	57	-4.259	-9.758	3.669	1.00	0.00
ATOM	910	CB	LYS	57	-6.075	-9.490	2.576	1.00	0.00
ATOM	911	HB1	LYS	57	-6.549	-9.007	3.418	1.00	0.00
ATOM	912	HB2	LYS	57	-6.396	-9.008	1.668	1.00	0.00
ATOM	913	CG	LYS	57	-6.542	-10.935	2.530	1.00	0.00
ATOM	914	HG1	LYS	57	-6.160	-11.395	1.629	1.00	0.00
ATOM	915	HG2	LYS	57	-7.622	-10.954	2.517	1.00	0.00
ATOM	916	CD	LYS	57	-6.049	-11.720	3.735	1.00	0.00
ATOM	917	HD1	LYS	57	-5.944	-11.047	4.573	1.00	0.00
ATOM	918	HD2	LYS	57	-5.090	-12.157	3.498	1.00	0.00
ATOM	919	CE	LYS	57	-7.017	-12.831	4.112	1.00	0.00
ATOM	920	HE1	LYS	57	-7.967	-12.640	3.635	1.00	0.00
ATOM	921	HE2	LYS	57	-6.621	-13.771	3.759	1.00	0.00
ATOM	922	NZ	LYS	57	-7.223	-12.915	5.585	1.00	0.00
ATOM	923	HZ1	LYS	57	-6.363	-12.609	6.084	1.00	0.00
ATOM	924	HZ2	LYS	57	-7.441	-13.894	5.860	1.00	0.00
ATOM	925	HZ3	LYS	57	-8.013	-12.302	5.871	1.00	0.00
ATOM	926	C	LYS	57	-3.855	-10.144	1.617	1.00	0.00
ATOM	927	O	LYS	57	-3.197	-11.146	1.895	1.00	0.00
ATOM	928	N	THR	58	-4.014	-9.714	0.370	1.00	0.00
ATOM	929	HN	THR	58	-4.551	-8.913	0.201	1.00	0.00
ATOM	930	CA	THR	58	-3.403	-10.411	-0.755	1.00	0.00
ATOM	931	HA	THR	58	-3.409	-11.465	-0.527	1.00	0.00
ATOM	932	CB	THR	58	-4.223	-10.177	-2.031	1.00	0.00
ATOM	933	HB	THR	58	-4.448	-9.126	-2.112	1.00	0.00
ATOM	934	OG1	THR	58	-5.448	-10.887	-1.970	1.00	0.00
ATOM	935	HG1	THR	58	-5.974	-10.557	-1.238	1.00	0.00
ATOM	936	CG2	THR	58	-3.515	-10.598	-3.304	1.00	0.00
ATOM	937	HG21	THR	58	-4.236	-11.003	-3.999	1.00	0.00
ATOM	938	HG22	THR	58	-2.775	-11.349	-3.073	1.00	0.00
ATOM	939	HG23	THR	58	-3.031	-9.740	-3.747	1.00	0.00
ATOM	940	C	THR	58	-1.956	-9.961	-0.952	1.00	0.00
ATOM	941	O	THR	58	-1.093	-10.759	-1.318	1.00	0.00
ATOM	942	N	MET	59	-1.697	-8.682	-0.701	1.00	0.00
ATOM	943	HN	MET	59	-2.426	-8.092	-0.413	1.00	0.00
ATOM	944	CA	MET	59	-0.355	-8.132	-0.851	1.00	0.00
ATOM	945	HA	MET	59	0.020	-8.431	-1.819	1.00	0.00
ATOM	946	CB	MET	59	-0.404	-6.605	-0.783	1.00	0.00
ATOM	947	HB1	MET	59	0.536	-6.209	-1.138	1.00	0.00
ATOM	948	HB2	MET	59	-1.200	-6.252	-1.423	1.00	0.00
ATOM	949	CG	MET	59	-0.650	-6.072	0.617	1.00	0.00
ATOM	950	HG1	MET	59	-1.503	-6.585	1.032	1.00	0.00
ATOM	951	HG2	MET	59	0.218	-6.279	1.223	1.00	0.00
ATOM	952	SD	MET	59	-0.969	-4.297	0.643	1.00	0.00
ATOM	953	CE	MET	59	0.230	-3.715	-0.554	1.00	0.00
ATOM	954	HE1	MET	59	0.178	-4.324	-1.443	1.00	0.00
ATOM	955	HE2	MET	59	1.221	-3.779	-0.131	1.00	0.00
ATOM	956	HE3	MET	59	0.016	-2.688	-0.808	1.00	0.00
ATOM	957	C	MET	59	0.582	-8.669	0.228	1.00	0.00
ATOM	958	O	MET	59	1.701	-9.092	-0.061	1.00	0.00
ATOM	959	N	SER	60	0.126	-8.621	1.476	1.00	0.00
ATOM	960	HN	SER	60	-0.772	-8.270	1.644	1.00	0.00
ATOM	961	CA	SER	60	0.925	-9.088	2.601	1.00	0.00
ATOM	962	HA	SER	60	1.789	-8.445	2.682	1.00	0.00
ATOM	963	CB	SER	60	0.117	-9.004	3.898	1.00	0.00
ATOM	964	HB1	SER	60	0.214	-8.013	4.315	1.00	0.00
ATOM	965	HB2	SER	60	-0.922	-9.205	3.686	1.00	0.00
ATOM	966	OG	SER	60	0.579	-9.946	4.852	1.00	0.00
ATOM	967	HG	SER	60	1.273	-9.548	5.383	1.00	0.00
ATOM	968	C	SER	60	1.401	-10.517	2.372	1.00	0.00
ATOM	969	O	SER	60	2.417	-10.939	2.923	1.00	0.00
ATOM	970	N	GLU	61	0.665	-11.258	1.551	1.00	0.00
ATOM	971	HN	GLU	61	-0.134	-10.867	1.137	1.00	0.00
ATOM	972	CA	GLU	61	1.022	-12.636	1.249	1.00	0.00
ATOM	973	HA	GLU	61	1.138	-13.156	2.186	1.00	0.00
ATOM	974	CB	GLU	61	-0.084	-13.309	0.435	1.00	0.00
ATOM	975	HB1	GLU	61	0.025	-14.380	0.516	1.00	0.00
ATOM	976	HB2	GLU	61	0.021	-13.022	-0.601	1.00	0.00
ATOM	977	CG	GLU	61	-1.484	-12.937	0.891	1.00	0.00
ATOM	978	HG1	GLU	61	-1.460	-12.730	1.951	1.00	0.00
ATOM	979	HG2	GLU	61	-1.797	-12.051	0.360	1.00	0.00
ATOM	980	CD	GLU	61	-2.493	-14.039	0.636	1.00	0.00
ATOM	981	OE1	GLU	61	-2.755	-14.830	1.567	1.00	0.00
ATOM	982	OE2	GLU	61	-3.020	-14.112	-0.494	1.00	0.00
ATOM	983	C	GLU	61	2.338	-12.695	0.485	1.00	0.00
ATOM	984	O	GLU	61	3.295	-13.334	0.922	1.00	0.00
ATOM	985	N	ARG	62	2.382	-12.013	-0.654	1.00	0.00
ATOM	986	HN	ARG	62	1.588	-11.524	-0.949	1.00	0.00
ATOM	987	CA	ARG	62	3.578	-11.980	-1.479	1.00	0.00
ATOM	988	HA	ARG	62	3.752	-12.979	-1.846	1.00	0.00
ATOM	989	CB	ARG	62	3.368	-11.045	-2.672	1.00	0.00
ATOM	990	HB1	ARG	62	4.330	-10.804	-3.101	1.00	0.00
ATOM	991	HB2	ARG	62	2.898	-10.136	-2.326	1.00	0.00
ATOM	992	CG	ARG	62	2.496	-11.652	-3.761	1.00	0.00
ATOM	993	HG1	ARG	62	1.895	-12.438	-3.328	1.00	0.00
ATOM	994	HG2	ARG	62	3.131	-12.065	-4.528	1.00	0.00
ATOM	995	CD	ARG	62	1.576	-10.619	-4.389	1.00	0.00
ATOM	996	HD1	ARG	62	2.043	-9.647	-4.320	1.00	0.00
ATOM	997	HD2	ARG	62	0.645	-10.609	-3.845	1.00	0.00
ATOM	998	NE	ARG	62	1.299	-10.916	-5.792	1.00	0.00
ATOM	999	HE	ARG	62	1.697	-10.330	-6.467	1.00	0.00
ATOM	1000	CZ	ARG	62	0.541	-11.931	-6.194	1.00	0.00
ATOM	1001	NH1	ARG	62	0.336	-12.136	-7.488	1.00	0.00
ATOM	1002	HH11	ARG	62	0.753	-11.527	-8.163	1.00	0.00
ATOM	1003	HH12	ARG	62	-0.235	-12.900	-7.789	1.00	0.00
ATOM	1004	NH2	ARG	62	-0.014	-12.742	-5.303	1.00	0.00
ATOM	1005	HH21	ARG	62	0.139	-12.590	-4.326	1.00	0.00
ATOM	1006	HH22	ARG	62	-0.583	-13.505	-5.608	1.00	0.00
ATOM	1007	C	ARG	62	4.790	-11.542	-0.664	1.00	0.00
ATOM	1008	O	ARG	62	5.781	-12.266	-0.576	1.00	0.00
ATOM	1009	N	LEU	63	4.700	-10.366	-0.052	1.00	0.00
ATOM	1010	HN	LEU	63	3.882	-9.835	-0.149	1.00	0.00
ATOM	1011	CA	LEU	63	5.792	-9.853	0.768	1.00	0.00
ATOM	1012	HA	LEU	63	6.634	-9.663	0.117	1.00	0.00
ATOM	1013	CB	LEU	63	5.384	-8.546	1.450	1.00	0.00
ATOM	1014	HB1	LEU	63	5.208	-7.805	0.685	1.00	0.00
ATOM	1015	HB2	LEU	63	4.460	-8.716	1.982	1.00	0.00
ATOM	1016	CG	LEU	63	6.413	-7.984	2.436	1.00	0.00
ATOM	1017	HG	LEU	63	7.141	-8.747	2.663	1.00	0.00
ATOM	1018	CD1	LEU	63	7.148	-6.804	1.825	1.00	0.00
ATOM	1019	HD11	LEU	63	6.457	-5.991	1.672	1.00	0.00
ATOM	1020	HD12	LEU	63	7.575	-7.097	0.877	1.00	0.00
ATOM	1021	HD13	LEU	63	7.937	-6.487	2.492	1.00	0.00
ATOM	1022	CD2	LEU	63	5.741	-7.580	3.738	1.00	0.00
ATOM	1023	HD21	LEU	63	4.709	-7.899	3.726	1.00	0.00
ATOM	1024	HD22	LEU	63	5.785	-6.507	3.848	1.00	0.00
ATOM	1025	HD23	LEU	63	6.252	-8.049	4.565	1.00	0.00
ATOM	1026	C	LEU	63	6.204	-10.880	1.817	1.00	0.00
ATOM	1027	O	LEU	63	7.391	-11.134	2.019	1.00	0.00
ATOM	1028	N	LYS	64	5.212	-11.475	2.475	1.00	0.00
ATOM	1029	HN	LYS	64	4.287	-11.235	2.262	1.00	0.00
ATOM	1030	CA	LYS	64	5.469	-12.487	3.492	1.00	0.00
ATOM	1031	HA	LYS	64	5.942	-12.002	4.333	1.00	0.00
ATOM	1032	CB	LYS	64	4.155	-13.122	3.953	1.00	0.00
ATOM	1033	HB1	LYS	64	3.506	-13.240	3.098	1.00	0.00
ATOM	1034	HB2	LYS	64	4.365	-14.094	4.372	1.00	0.00
ATOM	1035	CG	LYS	64	3.416	-12.301	5.000	1.00	0.00
ATOM	1036	HG1	LYS	64	3.615	-11.254	4.828	1.00	0.00
ATOM	1037	HG2	LYS	64	2.356	-12.488	4.907	1.00	0.00
ATOM	1038	CD	LYS	64	3.859	-12.663	6.408	1.00	0.00
ATOM	1039	HD1	LYS	64	3.007	-13.038	6.957	1.00	0.00
ATOM	1040	HD2	LYS	64	4.618	-13.428	6.351	1.00	0.00
ATOM	1041	CE	LYS	64	4.426	-11.459	7.141	1.00	0.00
ATOM	1042	HE1	LYS	64	4.711	-10.712	6.414	1.00	0.00
ATOM	1043	HE2	LYS	64	3.663	-11.056	7.790	1.00	0.00
ATOM	1044	NZ	LYS	64	5.618	-11.817	7.959	1.00	0.00
ATOM	1045	HZ1	LYS	64	6.086	-12.655	7.560	1.00	0.00
ATOM	1046	HZ2	LYS	64	5.332	-12.025	8.936	1.00	0.00
ATOM	1047	HZ3	LYS	64	6.295	-11.028	7.968	1.00	0.00
ATOM	1048	C	LYS	64	6.407	-13.562	2.953	1.00	0.00
ATOM	1049	O	LYS	64	7.255	-14.082	3.677	1.00	0.00
ATOM	1050	N	ASN	65	6.256	-13.879	1.671	1.00	0.00
ATOM	1051	HN	ASN	65	5.569	-13.420	1.143	1.00	0.00
ATOM	1052	CA	ASN	65	7.103	-14.872	1.023	1.00	0.00
ATOM	1053	HA	ASN	65	7.632	-15.410	1.795	1.00	0.00
ATOM	1054	CB	ASN	65	6.254	-15.855	0.214	1.00	0.00
ATOM	1055	HB1	ASN	65	6.762	-16.082	-0.712	1.00	0.00
ATOM	1056	HB2	ASN	65	5.299	-15.400	-0.006	1.00	0.00
ATOM	1057	CG	ASN	65	6.006	-17.155	0.954	1.00	0.00
ATOM	1058	OD1	ASN	65	6.266	-18.239	0.433	1.00	0.00
ATOM	1059	ND2	ASN	65	5.501	-17.052	2.178	1.00	0.00
ATOM	1060	HD21	ASN	65	5.318	-16.156	2.530	1.00	0.00
ATOM	1061	HD22	ASN	65	5.331	-17.877	2.679	1.00	0.00
ATOM	1062	C	ASN	65	8.122	-14.195	0.119	1.00	0.00
ATOM	1063	O	ASN	65	8.532	-14.749	-0.901	1.00	0.00
ATOM	1064	N	ARG	66	8.535	-12.995	0.510	1.00	0.00
ATOM	1065	HN	ARG	66	8.174	-12.614	1.338	1.00	0.00
ATOM	1066	CA	ARG	66	9.524	-12.235	-0.247	1.00	0.00
ATOM	1067	HA	ARG	66	9.535	-11.232	0.148	1.00	0.00
ATOM	1068	CB	ARG	66	10.919	-12.848	-0.092	1.00	0.00
ATOM	1069	HB1	ARG	66	11.122	-13.471	-0.950	1.00	0.00
ATOM	1070	HB2	ARG	66	11.643	-12.051	-0.063	1.00	0.00
ATOM	1071	CG	ARG	66	11.100	-13.692	1.161	1.00	0.00
ATOM	1072	HG1	ARG	66	11.963	-14.321	1.031	1.00	0.00
ATOM	1073	HG2	ARG	66	10.225	-14.307	1.303	1.00	0.00
ATOM	1074	CD	ARG	66	11.298	-12.825	2.392	1.00	0.00
ATOM	1075	HD1	ARG	66	11.969	-12.017	2.143	1.00	0.00
ATOM	1076	HD2	ARG	66	10.342	-12.420	2.689	1.00	0.00
ATOM	1077	NE	ARG	66	11.860	-13.580	3.509	1.00	0.00
ATOM	1078	HE	ARG	66	12.826	-13.512	3.663	1.00	0.00
ATOM	1079	CZ	ARG	66	11.136	-14.344	4.319	1.00	0.00
ATOM	1080	NH1	ARG	66	11.719	-14.998	5.314	1.00	0.00
ATOM	1081	HH11	ARG	66	12.706	-14.917	5.455	1.00	0.00
ATOM	1082	HH12	ARG	66	11.173	-15.573	5.923	1.00	0.00
ATOM	1083	NH2	ARG	66	9.827	-14.454	4.136	1.00	0.00
ATOM	1084	HH21	ARG	66	9.384	-13.963	3.387	1.00	0.00
ATOM	1085	HH22	ARG	66	9.284	-15.030	4.747	1.00	0.00
ATOM	1086	C	ARG	66	9.153	-12.177	-1.725	1.00	0.00
ATOM	1087	O	ARG	66	10.018	-12.041	-2.590	1.00	0.00
ATOM	1088	N	TYR	67	7.862	-12.285	-2.002	1.00	0.00
ATOM	1089	HN	TYR	67	7.230	-12.408	-1.266	1.00	0.00
ATOM	1090	CA	TYR	67	7.364	-12.275	-3.374	1.00	0.00
ATOM	1091	HA	TYR	67	8.125	-12.708	-4.006	1.00	0.00
ATOM	1092	CB	TYR	67	6.091	-13.117	-3.475	1.00	0.00
ATOM	1093	HB1	TYR	67	6.193	-13.995	-2.856	1.00	0.00
ATOM	1094	HB2	TYR	67	5.259	-12.530	-3.121	1.00	0.00
ATOM	1095	CG	TYR	67	5.767	-13.566	-4.881	1.00	0.00
ATOM	1096	CD1	TYR	67	6.113	-14.835	-5.326	1.00	0.00
ATOM	1097	HD1	TYR	67	6.628	-15.506	-4.654	1.00	0.00
ATOM	1098	CD2	TYR	67	5.107	-12.720	-5.761	1.00	0.00
ATOM	1099	HD2	TYR	67	4.827	-11.731	-5.427	1.00	0.00
ATOM	1100	CE1	TYR	67	5.811	-15.247	-6.611	1.00	0.00

REPLACEMENT SHEET

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ATOM   1101  HE1 TYR    67       6.089 -16.237  -6.940  1.00  0.00
ATOM   1102  CE2 TYR    67       4.798 -13.123  -7.044  1.00  0.00
ATOM   1103  HE2 TYR    67       4.281 -12.449  -7.711  1.00  0.00
ATOM   1104  CZ  TYR    67       5.153 -14.387  -7.466  1.00  0.00
ATOM   1105  OH  TYR    67       4.850 -14.793  -8.745  1.00  0.00
ATOM   1106  HH  TYR    67       4.026 -15.286  -8.737  1.00  0.00
ATOM   1107  C   TYR    67       7.066 -10.860  -3.859  1.00  0.00
ATOM   1108  O   TYR    67       6.990 -10.616  -5.063  1.00  0.00
ATOM   1109  N   TYR    68       6.859  -9.937  -2.925  1.00  0.00
ATOM   1110  HN  TYR    68       6.909 -10.187  -1.978  1.00  0.00
ATOM   1111  CA  TYR    68       6.515  -8.568  -3.280  1.00  0.00
ATOM   1112  HA  TYR    68       6.570  -8.478  -4.355  1.00  0.00
ATOM   1113  CB  TYR    68       5.089  -8.263  -2.821  1.00  0.00
ATOM   1114  HB1 TYR    68       4.746  -9.065  -2.186  1.00  0.00
ATOM   1115  HB2 TYR    68       5.096  -7.348  -2.256  1.00  0.00
ATOM   1116  CG  TYR    68       4.089  -8.103  -3.946  1.00  0.00
ATOM   1117  CD1 TYR    68       4.278  -8.729  -5.174  1.00  0.00
ATOM   1118  HD1 TYR    68       5.157  -9.336  -5.327  1.00  0.00
ATOM   1119  CD2 TYR    68       2.946  -7.334  -3.772  1.00  0.00
ATOM   1120  HD2 TYR    68       2.783  -6.844  -2.823  1.00  0.00
ATOM   1121  CE1 TYR    68       3.359  -8.582  -6.196  1.00  0.00
ATOM   1122  HE1 TYR    68       3.523  -9.075  -7.143  1.00  0.00
ATOM   1123  CE2 TYR    68       2.022  -7.185  -4.789  1.00  0.00
ATOM   1124  HE2 TYR    68       1.141  -6.581  -4.633  1.00  0.00
ATOM   1125  CZ  TYR    68       2.233  -7.811  -5.998  1.00  0.00
ATOM   1126  OH  TYR    68       1.315  -7.665  -7.012  1.00  0.00
ATOM   1127  HH  TYR    68       0.444  -7.518  -6.637  1.00  0.00
ATOM   1128  C   TYR    68       7.484  -7.570  -2.656  1.00  0.00
ATOM   1129  O   TYR    68       7.096  -6.457  -2.303  1.00  0.00
ATOM   1130  N   VAL    69       8.744  -7.967  -2.529  1.00  0.00
ATOM   1131  HN  VAL    69       9.000  -8.862  -2.835  1.00  0.00
ATOM   1132  CA  VAL    69       9.761  -7.086  -1.962  1.00  0.00
ATOM   1133  HA  VAL    69       9.284  -6.461  -1.221  1.00  0.00
ATOM   1134  CB  VAL    69      10.907  -7.854  -1.276  1.00  0.00
ATOM   1135  HB  VAL    69      11.715  -7.964  -1.984  1.00  0.00
ATOM   1136  CG1 VAL    69      10.465  -9.242  -0.846  1.00  0.00
ATOM   1137  HG11 VAL    69       9.487  -9.183  -0.393  1.00  0.00
ATOM   1138  HG12 VAL    69      11.171  -9.640  -0.133  1.00  0.00
ATOM   1139  HG13 VAL    69      10.423  -9.887  -1.712  1.00  0.00
ATOM   1140  CG2 VAL    69      11.422  -7.059  -0.090  1.00  0.00
ATOM   1141  HG21 VAL    69      12.197  -7.619   0.411  1.00  0.00
ATOM   1142  HG22 VAL    69      10.608  -6.872   0.597  1.00  0.00
ATOM   1143  HG23 VAL    69      11.822  -6.118  -0.438  1.00  0.00
ATOM   1144  C   VAL    69      10.352  -6.199  -3.043  1.00  0.00
ATOM   1145  O   VAL    69      11.543  -6.272  -3.345  1.00  0.00
ATOM   1146  N   SER    70       9.507  -5.372  -3.634  1.00  0.00
ATOM   1147  HN  SER    70       8.566  -5.371  -3.359  1.00  0.00
ATOM   1148  CA  SER    70       9.934  -4.491  -4.703  1.00  0.00
ATOM   1149  HA  SER    70      10.985  -4.285  -4.564  1.00  0.00
ATOM   1150  CB  SER    70       9.734  -5.190  -6.045  1.00  0.00
ATOM   1151  HB1 SER    70      10.626  -5.749  -6.289  1.00  0.00
ATOM   1152  HB2 SER    70       8.898  -5.868  -5.966  1.00  0.00
ATOM   1153  OG  SER    70       9.476  -4.258  -7.081  1.00  0.00
ATOM   1154  HG  SER    70      10.175  -3.600  -7.102  1.00  0.00
ATOM   1155  C   SER    70       9.164  -3.179  -4.657  1.00  0.00
ATOM   1156  O   SER    70       7.969  -3.158  -4.359  1.00  0.00
ATOM   1157  N   LYS    71       9.861  -2.083  -4.924  1.00  0.00
ATOM   1158  HN  LYS    71      10.816  -2.163  -5.131  1.00  0.00
ATOM   1159  CA  LYS    71       9.258  -0.761  -4.863  1.00  0.00
ATOM   1160  HA  LYS    71       8.988  -0.582  -3.832  1.00  0.00
ATOM   1161  CB  LYS    71      10.271   0.305  -5.297  1.00  0.00
ATOM   1162  HB1 LYS    71      11.076   0.332  -4.577  1.00  0.00
ATOM   1163  HB2 LYS    71      10.673   0.029  -6.261  1.00  0.00
ATOM   1164  CG  LYS    71       9.687   1.706  -5.409  1.00  0.00
ATOM   1165  HG1 LYS    71       9.954   2.267  -4.528  1.00  0.00
ATOM   1166  HG2 LYS    71       8.613   1.638  -5.482  1.00  0.00
ATOM   1167  CD  LYS    71      10.218   2.433  -6.634  1.00  0.00
ATOM   1168  HD1 LYS    71      11.033   1.863  -7.054  1.00  0.00
ATOM   1169  HD2 LYS    71       9.424   2.521  -7.360  1.00  0.00
ATOM   1170  CE  LYS    71      10.721   3.824  -6.282  1.00  0.00
ATOM   1171  HE1 LYS    71      11.466   3.737  -5.506  1.00  0.00
ATOM   1172  HE2 LYS    71       9.891   4.412  -5.919  1.00  0.00
ATOM   1173  NZ  LYS    71      11.323   4.511  -7.457  1.00  0.00
ATOM   1174  HZ1 LYS    71      10.580   4.970  -8.023  1.00  0.00
ATOM   1175  HZ2 LYS    71      11.823   3.823  -8.056  1.00  0.00
ATOM   1176  HZ3 LYS    71      12.000   5.234  -7.141  1.00  0.00
ATOM   1177  C   LYS    71       7.984  -0.678  -5.707  1.00  0.00
ATOM   1178  O   LYS    71       6.898  -1.000  -5.224  1.00  0.00
ATOM   1179  N   LYS    72       8.116  -0.244  -6.964  1.00  0.00
ATOM   1180  HN  LYS    72       9.002   0.015  -7.290  1.00  0.00
ATOM   1181  CA  LYS    72       6.963  -0.053  -7.846  1.00  0.00
ATOM   1182  HA  LYS    72       6.511   0.892  -7.580  1.00  0.00
ATOM   1183  CB  LYS    72       7.419   0.008  -9.305  1.00  0.00
ATOM   1184  HB1 LYS    72       8.261   0.680  -9.379  1.00  0.00
ATOM   1185  HB2 LYS    72       7.728  -0.979  -9.615  1.00  0.00
ATOM   1186  CG  LYS    72       6.339   0.491 -10.258  1.00  0.00
ATOM   1187  HG1 LYS    72       6.588   0.174 -11.260  1.00  0.00
ATOM   1188  HG2 LYS    72       5.394   0.057  -9.965  1.00  0.00
ATOM   1189  CD  LYS    72       6.214   2.005 -10.238  1.00  0.00
ATOM   1190  HD1 LYS    72       5.264   2.284 -10.669  1.00  0.00
ATOM   1191  HD2 LYS    72       6.261   2.347  -9.214  1.00  0.00
ATOM   1192  CE  LYS    72       7.329   2.668 -11.031  1.00  0.00
ATOM   1193  HE1 LYS    72       7.643   3.559 -10.508  1.00  0.00
ATOM   1194  HE2 LYS    72       8.160   1.981 -11.102  1.00  0.00
ATOM   1195  NZ  LYS    72       6.889   3.041 -12.403  1.00  0.00
ATOM   1196  HZ1 LYS    72       7.488   3.805 -12.775  1.00  0.00
ATOM   1197  HZ2 LYS    72       5.902   3.366 -12.386  1.00  0.00
ATOM   1198  HZ3 LYS    72       6.961   2.219 -13.037  1.00  0.00
ATOM   1199  C   LYS    72       5.915  -1.152  -7.680  1.00  0.00
ATOM   1200  O   LYS    72       4.723  -0.913  -7.869  1.00  0.00
ATOM   1201  N   LEU    73       6.357  -2.345  -7.305  1.00  0.00
ATOM   1202  HN  LEU    73       7.318  -2.480  -7.168  1.00  0.00
ATOM   1203  CA  LEU    73       5.446  -3.462  -7.101  1.00  0.00
ATOM   1204  HA  LEU    73       4.802  -3.527  -7.966  1.00  0.00
ATOM   1205  CB  LEU    73       6.231  -4.764  -6.964  1.00  0.00
ATOM   1206  HB1 LEU    73       6.470  -4.910  -5.922  1.00  0.00
ATOM   1207  HB2 LEU    73       7.152  -4.656  -7.512  1.00  0.00
ATOM   1208  CG  LEU    73       5.508  -6.014  -7.466  1.00  0.00
ATOM   1209  HG  LEU    73       4.553  -6.094  -6.966  1.00  0.00
ATOM   1210  CD1 LEU    73       6.315  -7.262  -7.145  1.00  0.00
ATOM   1211  HD11 LEU    73       6.321  -7.421  -6.076  1.00  0.00
ATOM   1212  HD12 LEU    73       7.328  -7.136  -7.496  1.00  0.00
ATOM   1213  HD13 LEU    73       5.868  -8.115  -7.633  1.00  0.00
ATOM   1214  CD2 LEU    73       5.247  -5.915  -8.961  1.00  0.00
ATOM   1215  HD21 LEU    73       4.982  -6.889  -9.345  1.00  0.00
ATOM   1216  HD22 LEU    73       6.138  -5.562  -9.459  1.00  0.00
ATOM   1217  HD23 LEU    73       4.437  -5.224  -9.140  1.00  0.00
ATOM   1218  C   LEU    73       4.587  -3.247  -5.861  1.00  0.00
ATOM   1219  O   LEU    73       3.375  -3.053  -5.958  1.00  0.00
ATOM   1220  N   PHE    74       5.218  -3.316  -4.693  1.00  0.00
ATOM   1221  HN  PHE    74       6.184  -3.474  -4.678  1.00  0.00
ATOM   1222  CA  PHE    74       4.513  -3.144  -3.434  1.00  0.00
ATOM   1223  HA  PHE    74       3.549  -3.622  -3.526  1.00  0.00
ATOM   1224  CB  PHE    74       5.290  -3.809  -2.305  1.00  0.00
ATOM   1225  HB1 PHE    74       6.174  -3.224  -2.095  1.00  0.00
ATOM   1226  HB2 PHE    74       5.587  -4.799  -2.614  1.00  0.00
ATOM   1227  CG  PHE    74       4.504  -3.929  -1.033  1.00  0.00
ATOM   1228  CD1 PHE    74       4.062  -5.163  -0.585  1.00  0.00
ATOM   1229  HD1 PHE    74       4.271  -6.043  -1.166  1.00  0.00
ATOM   1230  CD2 PHE    74       4.223  -2.807  -0.277  1.00  0.00
ATOM   1231  HD2 PHE    74       4.578  -1.842  -0.610  1.00  0.00
ATOM   1232  CE1 PHE    74       3.350  -5.272   0.593  1.00  0.00
ATOM   1233  HE1 PHE    74       3.006  -6.238   0.930  1.00  0.00
ATOM   1234  CE2 PHE    74       3.518  -2.911   0.903  1.00  0.00
ATOM   1235  HE2 PHE    74       3.316  -2.029   1.489  1.00  0.00
ATOM   1236  CZ  PHE    74       3.087  -4.144   1.342  1.00  0.00
ATOM   1237  HZ  PHE    74       2.524  -4.223   2.257  1.00  0.00
ATOM   1238  C   PHE    74       4.300  -1.670  -3.113  1.00  0.00
ATOM   1239  O   PHE    74       3.172  -1.236  -2.879  1.00  0.00
ATOM   1240  N   MET    75       5.392  -0.902  -3.095  1.00  0.00
ATOM   1241  HN  MET    75       6.262  -1.309  -3.281  1.00  0.00
ATOM   1242  CA  MET    75       5.324   0.529  -2.788  1.00  0.00
ATOM   1243  HA  MET    75       5.190   0.628  -1.721  1.00  0.00
ATOM   1244  CB  MET    75       6.617   1.240  -3.192  1.00  0.00
ATOM   1245  HB1 MET    75       6.403   2.289  -3.330  1.00  0.00
ATOM   1246  HB2 MET    75       6.964   0.834  -4.124  1.00  0.00
ATOM   1247  CG  MET    75       7.738   1.120  -2.171  1.00  0.00
ATOM   1248  HG1 MET    75       8.668   1.379  -2.652  1.00  0.00
ATOM   1249  HG2 MET    75       7.546   1.818  -1.373  1.00  0.00
ATOM   1250  SD  MET    75       7.907  -0.529  -1.461  1.00  0.00
ATOM   1251  CE  MET    75       7.869  -0.153   0.288  1.00  0.00
ATOM   1252  HE1 MET    75       8.136  -1.036   0.851  1.00  0.00
ATOM   1253  HE2 MET    75       6.875   0.161   0.564  1.00  0.00
ATOM   1254  HE3 MET    75       8.569   0.638   0.506  1.00  0.00
ATOM   1255  C   MET    75       4.136   1.176  -3.488  1.00  0.00
ATOM   1256  O   MET    75       3.495   2.073  -2.942  1.00  0.00
ATOM   1257  N   ALA    76       3.826   0.692  -4.687  1.00  0.00
ATOM   1258  HN  ALA    76       4.346  -0.055  -5.060  1.00  0.00
ATOM   1259  CA  ALA    76       2.659   1.177  -5.404  1.00  0.00
ATOM   1260  HA  ALA    76       2.666   2.259  -5.381  1.00  0.00
ATOM   1261  CB  ALA    76       2.669   0.723  -6.853  1.00  0.00
ATOM   1262  HB1 ALA    76       3.441   1.251  -7.393  1.00  0.00
ATOM   1263  HB2 ALA    76       1.706   0.935  -7.300  1.00  0.00
ATOM   1264  HB3 ALA    76       2.858  -0.338  -6.895  1.00  0.00
ATOM   1265  C   ALA    76       1.409   0.682  -4.714  1.00  0.00
ATOM   1266  O   ALA    76       0.613   1.472  -4.236  1.00  0.00
ATOM   1267  N   ASP    77       1.286  -0.640  -4.600  1.00  0.00
ATOM   1268  HN  ASP    77       1.977  -1.214  -4.989  1.00  0.00
ATOM   1269  CA  ASP    77       0.136  -1.260  -3.941  1.00  0.00
ATOM   1270  HA  ASP    77      -0.692  -1.239  -4.637  1.00  0.00
ATOM   1271  CB  ASP    77       0.454  -2.714  -3.586  1.00  0.00
ATOM   1272  HB1 ASP    77       1.280  -2.736  -2.891  1.00  0.00
ATOM   1273  HB2 ASP    77      -0.413  -3.164  -3.124  1.00  0.00
ATOM   1274  CG  ASP    77       0.831  -3.537  -4.802  1.00  0.00
ATOM   1275  OD1 ASP    77       0.295  -3.261  -5.896  1.00  0.00
ATOM   1276  OD2 ASP    77       1.666  -4.455  -4.661  1.00  0.00
ATOM   1277  C   ASP    77      -0.266  -0.491  -2.685  1.00  0.00
ATOM   1278  O   ASP    77      -1.436  -0.169  -2.498  1.00  0.00
ATOM   1279  N   LEU    78       0.718  -0.155  -1.857  1.00  0.00
ATOM   1280  HN  LEU    78       1.639  -0.417  -2.071  1.00  0.00
ATOM   1281  CA  LEU    78       0.464   0.617  -0.649  1.00  0.00
ATOM   1282  HA  LEU    78      -0.294   0.104  -0.077  1.00  0.00
ATOM   1283  CB  LEU    78       1.744   0.724   0.185  1.00  0.00
ATOM   1284  HB1 LEU    78       1.931   1.768   0.378  1.00  0.00
ATOM   1285  HB2 LEU    78       2.562   0.336  -0.402  1.00  0.00
ATOM   1286  CG  LEU    78       1.726  -0.016   1.529  1.00  0.00
ATOM   1287  HG  LEU    78       2.742  -0.221   1.827  1.00  0.00
ATOM   1288  CD1 LEU    78       0.998  -1.347   1.413  1.00  0.00
ATOM   1289  HD11 LEU    78      -0.066  -1.174   1.360  1.00  0.00
ATOM   1290  HD12 LEU    78       1.222  -1.955   2.277  1.00  0.00
ATOM   1291  HD13 LEU    78       1.327  -1.855   0.521  1.00  0.00
ATOM   1292  CD2 LEU    78       1.094   0.844   2.606  1.00  0.00
ATOM   1293  HD21 LEU    78       1.126   1.880   2.303  1.00  0.00
ATOM   1294  HD22 LEU    78       1.641   0.721   3.529  1.00  0.00
ATOM   1295  HD23 LEU    78       0.068   0.541   2.752  1.00  0.00
ATOM   1296  C   LEU    78      -0.045   2.009  -1.009  1.00  0.00
ATOM   1297  O   LEU    78      -1.164   2.385  -0.657  1.00  0.00
ATOM   1298  N   GLN    79       0.780   2.760  -1.731  1.00  0.00
ATOM   1299  HN  GLN    79       1.649   2.393  -1.995  1.00  0.00
ATOM   1300  CA  GLN    79       0.410   4.097  -2.184  1.00  0.00
ATOM   1301  HA  GLN    79       0.357   4.744  -1.321  1.00  0.00
ATOM   1302  CB  GLN    79       1.478   4.621  -3.154  1.00  0.00
ATOM   1303  HB1 GLN    79       1.727   3.833  -3.850  1.00  0.00
ATOM   1304  HB2 GLN    79       2.362   4.879  -2.591  1.00  0.00
ATOM   1305  CG  GLN    79       1.052   5.840  -3.958  1.00  0.00
ATOM   1306  HG1 GLN    79       0.674   5.507  -4.913  1.00  0.00
ATOM   1307  HG2 GLN    79       0.270   6.356  -3.421  1.00  0.00
ATOM   1308  CD  GLN    79       2.194   6.807  -4.202  1.00  0.00
ATOM   1309  OE1 GLN    79       2.596   7.551  -3.307  1.00  0.00
ATOM   1310  NE2 GLN    79       2.722   6.801  -5.420  1.00  0.00
ATOM   1311  HE21 GLN    79       3.462   7.416  -5.607  1.00  0.00
ATOM   1312  HE22 GLN    79       2.350   6.182  -6.083  1.00  0.00
ATOM   1313  C   GLN    79      -0.953   4.061  -2.870  1.00  0.00
ATOM   1314  O   GLN    79      -1.745   4.997  -2.768  1.00  0.00
ATOM   1315  N   ARG    80      -1.205   2.961  -3.563  1.00  0.00
ATOM   1316  HN  ARG    80      -0.522   2.263  -3.602  1.00  0.00
ATOM   1317  CA  ARG    80      -2.439   2.755  -4.287  1.00  0.00
ATOM   1318  HA  ARG    80      -2.705   3.686  -4.766  1.00  0.00
ATOM   1319  CB  ARG    80      -2.211   1.682  -5.363  1.00  0.00
ATOM   1320  HB1 ARG    80      -1.153   1.505  -5.449  1.00  0.00
ATOM   1321  HB2 ARG    80      -2.686   0.767  -5.059  1.00  0.00
ATOM   1322  CG  ARG    80      -2.725   2.063  -6.740  1.00  0.00
ATOM   1323  HG1 ARG    80      -2.057   2.795  -7.171  1.00  0.00
ATOM   1324  HG2 ARG    80      -2.742   1.180  -7.363  1.00  0.00
ATOM   1325  CD  ARG    80      -4.122   2.649  -6.682  1.00  0.00
ATOM   1326  HD1 ARG    80      -4.422   2.735  -5.653  1.00  0.00
ATOM   1327  HD2 ARG    80      -4.792   1.982  -7.193  1.00  0.00
ATOM   1328  NE  ARG    80      -4.186   3.966  -7.310  1.00  0.00
ATOM   1329  HE  ARG    80      -3.338   4.403  -7.534  1.00  0.00
ATOM   1330  CZ  ARG    80      -5.322   4.595  -7.594  1.00  0.00
ATOM   1331  NH1 ARG    80      -6.486   4.030  -7.305  1.00  0.00
ATOM   1332  HH11 ARG    80      -7.339   4.505  -7.519  1.00  0.00
ATOM   1333  HH12 ARG    80      -6.509   3.129  -6.872  1.00  0.00
ATOM   1334  NH2 ARG    80      -5.294   5.790  -8.168  1.00  0.00
ATOM   1335  HH21 ARG    80      -4.418   6.219  -8.386  1.00  0.00
ATOM   1336  HH22 ARG    80      -6.149   6.263  -8.380  1.00  0.00
ATOM   1337  C   ARG    80      -3.562   2.353  -3.329  1.00  0.00
ATOM   1338  O   ARG    80      -4.715   2.740  -3.513  1.00  0.00
ATOM   1339  N   VAL    81      -3.210   1.620  -2.273  1.00  0.00
ATOM   1340  HN  VAL    81      -2.271   1.367  -2.155  1.00  0.00
ATOM   1341  CA  VAL    81      -4.189   1.231  -1.261  1.00  0.00
ATOM   1342  HA  VAL    81      -4.947   0.630  -1.742  1.00  0.00
ATOM   1343  CB  VAL    81      -3.543   0.387  -0.129  1.00  0.00
ATOM   1344  HB  VAL    81      -2.648   0.893   0.201  1.00  0.00
ATOM   1345  CG1 VAL    81      -3.147  -0.988  -0.645  1.00  0.00
ATOM   1346  HG11 VAL    81      -2.073  -1.089  -0.614  1.00  0.00
ATOM   1347  HG12 VAL    81      -3.491  -1.105  -1.661  1.00  0.00
ATOM   1348  HG13 VAL    81      -3.597  -1.750  -0.023  1.00  0.00
ATOM   1349  CG2 VAL    81      -4.476   0.247   1.070  1.00  0.00
ATOM   1350  HG21 VAL    81      -5.364  -0.291   0.774  1.00  0.00
ATOM   1351  HG22 VAL    81      -4.752   1.228   1.429  1.00  0.00
ATOM   1352  HG23 VAL    81      -3.972  -0.295   1.857  1.00  0.00
ATOM   1353  C   VAL    81      -4.844   2.481  -0.674  1.00  0.00
ATOM   1354  O   VAL    81      -6.050   2.507  -0.427  1.00  0.00
ATOM   1355  N   PHE    82      -4.037   3.515  -0.459  1.00  0.00
ATOM   1356  HN  PHE    82      -3.086   3.434  -0.684  1.00  0.00
ATOM   1357  CA  PHE    82      -4.533   4.774   0.080  1.00  0.00
ATOM   1358  HA  PHE    82      -5.269   4.545   0.837  1.00  0.00
ATOM   1359  CB  PHE    82      -3.390   5.572   0.717  1.00  0.00
ATOM   1360  HB1 PHE    82      -2.807   6.034  -0.065  1.00  0.00
ATOM   1361  HB2 PHE    82      -3.810   6.342   1.348  1.00  0.00
ATOM   1362  CG  PHE    82      -2.455   4.746   1.561  1.00  0.00
ATOM   1363  CD1 PHE    82      -2.850   3.520   2.077  1.00  0.00
ATOM   1364  HD1 PHE    82      -3.841   3.149   1.861  1.00  0.00
ATOM   1365  CD2 PHE    82      -1.180   5.209   1.850  1.00  0.00
ATOM   1366  HD2 PHE    82      -0.862   6.163   1.457  1.00  0.00
ATOM   1367  CE1 PHE    82      -1.988   2.768   2.853  1.00  0.00
ATOM   1368  HE1 PHE    82      -2.307   1.815   3.248  1.00  0.00
ATOM   1369  CE2 PHE    82      -0.316   4.462   2.627  1.00  0.00
ATOM   1370  HE2 PHE    82       0.675   4.834   2.842  1.00  0.00
ATOM   1371  CZ  PHE    82      -0.721   3.242   3.131  1.00  0.00
ATOM   1372  HZ  PHE    82      -0.047   2.659   3.741  1.00  0.00
ATOM   1373  C   PHE    82      -5.194   5.603  -1.016  1.00  0.00
ATOM   1374  O   PHE    82      -6.353   5.997  -0.895  1.00  0.00
ATOM   1375  N   THR    83      -4.450   5.849  -2.089  1.00  0.00
ATOM   1376  HN  THR    83      -3.536   5.499  -2.129  1.00  0.00
ATOM   1377  CA  THR    83      -4.968   6.616  -3.215  1.00  0.00
ATOM   1378  HA  THR    83      -5.151   7.624  -2.875  1.00  0.00
ATOM   1379  CB  THR    83      -3.941   6.649  -4.350  1.00  0.00
ATOM   1380  HB  THR    83      -3.649   5.637  -4.588  1.00  0.00
ATOM   1381  OG1 THR    83      -2.784   7.365  -3.955  1.00  0.00
ATOM   1382  HG1 THR    83      -2.246   6.813  -3.382  1.00  0.00
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ATOM   1383  CG2 THR   83      -4.464   7.286  -5.619  1.00  0.00
ATOM   1384 HG21 THR   83      -3.654   7.404  -6.323  1.00  0.00
ATOM   1385 HG22 THR   83      -4.884   8.255  -5.389  1.00  0.00
ATOM   1386 HG23 THR   83      -5.228   6.656  -6.049  1.00  0.00
ATOM   1387  C   THR   83      -6.278   6.017  -3.711  1.00  0.00
ATOM   1388  O   THR   83      -7.221   6.740  -4.033  1.00  0.00
ATOM   1389  N   ASN   84      -6.333   4.690  -3.756  1.00  0.00
ATOM   1390  HN  ASN   84      -5.550   4.170  -3.476  1.00  0.00
ATOM   1391  CA  ASN   84      -7.533   3.987  -4.190  1.00  0.00
ATOM   1392  HA  ASN   84      -7.822   4.381  -5.153  1.00  0.00
ATOM   1393  CB  ASN   84      -7.250   2.491  -4.321  1.00  0.00
ATOM   1394  HB1 ASN   84      -6.457   2.342  -5.039  1.00  0.00
ATOM   1395  HB2 ASN   84      -6.939   2.107  -3.362  1.00  0.00
ATOM   1396  CG  ASN   84      -8.464   1.707  -4.778  1.00  0.00
ATOM   1397  OD1 ASN   84      -9.459   2.282  -5.218  1.00  0.00
ATOM   1398  ND2 ASN   84      -8.388   0.385  -4.672  1.00  0.00
ATOM   1399 HD21 ASN   84      -7.564  -0.004  -4.312  1.00  0.00
ATOM   1400 HD22 ASN   84      -9.158  -0.147  -4.960  1.00  0.00
ATOM   1401  C   ASN   84      -8.670   4.212  -3.201  1.00  0.00
ATOM   1402  O   ASN   84      -9.656   4.879  -3.514  1.00  0.00
ATOM   1403  N   CYS   85      -8.520   3.657  -2.003  1.00  0.00
ATOM   1404  HN  CYS   85      -7.708   3.142  -1.812  1.00  0.00
ATOM   1405  CA  CYS   85      -9.526   3.808  -0.961  1.00  0.00
ATOM   1406  HA  CYS   85     -10.414   3.280  -1.276  1.00  0.00
ATOM   1407  CB  CYS   85      -9.028   3.205   0.354  1.00  0.00
ATOM   1408  HB1 CYS   85      -9.789   3.329   1.109  1.00  0.00
ATOM   1409  HB2 CYS   85      -8.132   3.724   0.665  1.00  0.00
ATOM   1410  SG  CYS   85      -8.635   1.443   0.257  1.00  0.00
ATOM   1411  HG  CYS   85      -9.362   0.955   0.652  1.00  0.00
ATOM   1412  C   CYS   85      -9.873   5.278  -0.759  1.00  0.00
ATOM   1413  O   CYS   85     -10.996   5.613  -0.398  1.00  0.00
ATOM   1414  N   LYS   86      -8.898   6.150  -0.993  1.00  0.00
ATOM   1415  HN  LYS   86      -8.021   5.820  -1.281  1.00  0.00
ATOM   1416  CA  LYS   86      -9.102   7.586  -0.840  1.00  0.00
ATOM   1417  HA  LYS   86      -9.725   7.741   0.029  1.00  0.00
ATOM   1418  CB  LYS   86      -7.758   8.290  -0.623  1.00  0.00
ATOM   1419  HB1 LYS   86      -7.355   7.984   0.330  1.00  0.00
ATOM   1420  HB2 LYS   86      -7.078   7.990  -1.405  1.00  0.00
ATOM   1421  CG  LYS   86      -7.853   9.807  -0.632  1.00  0.00
ATOM   1422  HG1 LYS   86      -8.858  10.091  -0.901  1.00  0.00
ATOM   1423  HG2 LYS   86      -7.625  10.178   0.356  1.00  0.00
ATOM   1424  CD  LYS   86      -6.882  10.424  -1.626  1.00  0.00
ATOM   1425  HD1 LYS   86      -7.437  11.020  -2.334  1.00  0.00
ATOM   1426  HD2 LYS   86      -6.363   9.633  -2.147  1.00  0.00
ATOM   1427  CE  LYS   86      -5.860  11.308  -0.930  1.00  0.00
ATOM   1428  HE1 LYS   86      -5.744  10.970   0.090  1.00  0.00
ATOM   1429  HE2 LYS   86      -4.916  11.221  -1.447  1.00  0.00
ATOM   1430  NZ  LYS   86      -6.276  12.738  -0.922  1.00  0.00
ATOM   1431  HZ1 LYS   86      -6.207  13.125   0.041  1.00  0.00
ATOM   1432  HZ2 LYS   86      -7.260  12.825  -1.249  1.00  0.00
ATOM   1433  HZ3 LYS   86      -5.663  13.292  -1.552  1.00  0.00
ATOM   1434  C   LYS   86      -9.805   8.175  -2.060  1.00  0.00
ATOM   1435  O   LYS   86     -10.579   9.126  -1.943  1.00  0.00
ATOM   1436  N   GLU   87      -9.518   7.615  -3.230  1.00  0.00
ATOM   1437  HN  GLU   87      -8.883   6.869  -3.259  1.00  0.00
ATOM   1438  CA  GLU   87     -10.101   8.103  -4.474  1.00  0.00
ATOM   1439  HA  GLU   87     -10.101   9.183  -4.435  1.00  0.00
ATOM   1440  CB  GLU   87      -9.256   7.649  -5.665  1.00  0.00
ATOM   1441  HB1 GLU   87      -9.884   7.607  -6.542  1.00  0.00
ATOM   1442  HB2 GLU   87      -8.869   6.662  -5.462  1.00  0.00
ATOM   1443  CG  GLU   87      -8.084   8.570  -5.963  1.00  0.00
ATOM   1444  HG1 GLU   87      -7.726   8.989  -5.033  1.00  0.00
ATOM   1445  HG2 GLU   87      -7.296   7.993  -6.424  1.00  0.00
ATOM   1446  CD  GLU   87      -8.460   9.707  -6.893  1.00  0.00
ATOM   1447  OE1 GLU   87      -9.484   9.583  -7.597  1.00  0.00
ATOM   1448  OE2 GLU   87      -7.732  10.721  -6.916  1.00  0.00
ATOM   1449  C   GLU   87     -11.539   7.621  -4.645  1.00  0.00
ATOM   1450  O   GLU   87     -12.422   8.397  -5.010  1.00  0.00
ATOM   1451  N   TYR   88     -11.769   6.338  -4.387  1.00  0.00
ATOM   1452  HN  TYR   88     -11.023   5.763  -4.109  1.00  0.00
ATOM   1453  CA  TYR   88     -13.100   5.757  -4.536  1.00  0.00
ATOM   1454  HA  TYR   88     -13.528   6.144  -5.449  1.00  0.00
ATOM   1455  CB  TYR   88     -13.000   4.234  -4.639  1.00  0.00
ATOM   1456  HB1 TYR   88     -12.032   3.971  -5.040  1.00  0.00
ATOM   1457  HB2 TYR   88     -13.104   3.806  -3.653  1.00  0.00
ATOM   1458  CG  TYR   88     -14.054   3.612  -5.527  1.00  0.00
ATOM   1459  CD1 TYR   88     -15.165   2.982  -4.982  1.00  0.00
ATOM   1460  HD1 TYR   88     -15.273   2.942  -3.908  1.00  0.00
ATOM   1461  CD2 TYR   88     -13.935   3.651  -6.911  1.00  0.00
ATOM   1462  HD2 TYR   88     -13.076   4.136  -7.350  1.00  0.00
ATOM   1463  CE1 TYR   88     -16.130   2.410  -5.790  1.00  0.00
ATOM   1464  HE1 TYR   88     -16.987   1.925  -5.347  1.00  0.00
ATOM   1465  CE2 TYR   88     -14.894   3.081  -7.726  1.00  0.00
ATOM   1466  HE2 TYR   88     -14.705   3.122  -8.800  1.00  0.00
ATOM   1467  CZ  TYR   88     -15.990   2.463  -7.161  1.00  0.00
ATOM   1468  OH  TYR   88     -16.947   1.893  -7.969  1.00  0.00
ATOM   1469  HH  TYR   88     -17.473   2.584  -8.378  1.00  0.00
ATOM   1470  C   TYR   88     -14.010   6.137  -3.368  1.00  0.00
ATOM   1471  O   TYR   88     -14.555   5.265  -2.691  1.00  0.00
ATOM   1472  N   ASN   89     -14.187   7.439  -3.150  1.00  0.00
ATOM   1473  HN  ASN   89     -13.737   8.087  -3.727  1.00  0.00
ATOM   1474  CA  ASN   89     -15.038   7.925  -2.070  1.00  0.00
ATOM   1475  HA  ASN   89     -15.652   7.102  -1.736  1.00  0.00
ATOM   1476  CB  ASN   89     -14.185   8.416  -0.899  1.00  0.00
ATOM   1477  HB1 ASN   89     -14.820   8.581  -0.042  1.00  0.00
ATOM   1478  HB2 ASN   89     -13.706   9.344  -1.173  1.00  0.00
ATOM   1479  CG  ASN   89     -13.113   7.419  -0.517  1.00  0.00
ATOM   1480  OD1 ASN   89     -12.001   7.796  -0.149  1.00  0.00
ATOM   1481  ND2 ASN   89     -13.444   6.136  -0.609  1.00  0.00
ATOM   1482 HD21 ASN   89     -12.769   5.467  -0.377  1.00  0.00
ATOM   1483 HD22 ASN   89     -14.348   5.910  -0.912  1.00  0.00
ATOM   1484  C   ASN   89     -15.944   9.048  -2.552  1.00  0.00
ATOM   1485  O   ASN   89     -15.701  10.222  -2.272  1.00  0.00
ATOM   1486  N   ALA   90     -16.997   8.680  -3.272  1.00  0.00
ATOM   1487  HN  ALA   90     -17.141   7.728  -3.456  1.00  0.00
ATOM   1488  CA  ALA   90     -17.954   9.655  -3.783  1.00  0.00
ATOM   1489  HA  ALA   90     -17.486  10.184  -4.599  1.00  0.00
ATOM   1490  CB  ALA   90     -19.185   8.946  -4.326  1.00  0.00
ATOM   1491  HB1 ALA   90     -19.230   7.944  -3.926  1.00  0.00
ATOM   1492  HB2 ALA   90     -19.128   8.901  -5.404  1.00  0.00
ATOM   1493  HB3 ALA   90     -20.072   9.490  -4.035  1.00  0.00
ATOM   1494  C   ALA   90     -18.356  10.662  -2.705  1.00  0.00
ATOM   1495  O   ALA   90     -18.383  11.868  -2.952  1.00  0.00
ATOM   1496  N   PRO   91     -18.657  10.179  -1.487  1.00  0.00
ATOM   1497  CA  PRO   91     -19.087  11.013  -0.381  1.00  0.00
ATOM   1498  HA  PRO   91     -19.505  11.951  -0.717  1.00  0.00
ATOM   1499  CB  PRO   91     -20.176  10.140   0.237  1.00  0.00
ATOM   1500  HB1 PRO   91     -20.271  10.369   1.289  1.00  0.00
ATOM   1501  HB2 PRO   91     -21.115  10.323  -0.263  1.00  0.00
ATOM   1502  CG  PRO   91     -19.704   8.730   0.022  1.00  0.00
ATOM   1503  HG1 PRO   91     -20.537   8.104  -0.258  1.00  0.00
ATOM   1504  HG2 PRO   91     -19.249   8.358   0.929  1.00  0.00
ATOM   1505  CD  PRO   91     -18.679   8.764  -1.094  1.00  0.00
ATOM   1506  HD1 PRO   91     -17.713   8.452  -0.724  1.00  0.00
ATOM   1507  HD2 PRO   91     -18.988   8.139  -1.919  1.00  0.00
ATOM   1508  C   PRO   91     -17.976  11.268   0.633  1.00  0.00
ATOM   1509  O   PRO   91     -18.242  11.671   1.766  1.00  0.00
ATOM   1510  N   GLU   92     -16.734  11.007   0.234  1.00  0.00
ATOM   1511  HN  GLU   92     -16.582  10.671  -0.674  1.00  0.00
ATOM   1512  CA  GLU   92     -15.596  11.174   1.132  1.00  0.00
ATOM   1513  HA  GLU   92     -14.728  10.745   0.654  1.00  0.00
ATOM   1514  CB  GLU   92     -15.340  12.658   1.408  1.00  0.00
ATOM   1515  HB1 GLU   92     -14.454  12.750   2.020  1.00  0.00
ATOM   1516  HB2 GLU   92     -16.183  13.062   1.949  1.00  0.00
ATOM   1517  CG  GLU   92     -15.139  13.487   0.150  1.00  0.00
ATOM   1518  HG1 GLU   92     -15.062  12.821  -0.696  1.00  0.00
ATOM   1519  HG2 GLU   92     -15.993  14.135   0.021  1.00  0.00
ATOM   1520  CD  GLU   92     -13.888  14.343   0.208  1.00  0.00
ATOM   1521  OE1 GLU   92     -13.118  14.335  -0.775  1.00  0.00
ATOM   1522  OE2 GLU   92     -13.679  15.021   1.236  1.00  0.00
ATOM   1523  C   GLU   92     -15.843  10.432   2.436  1.00  0.00
ATOM   1524  O   GLU   92     -15.529  10.925   3.519  1.00  0.00
ATOM   1525  N   SER   93     -16.427   9.248   2.313  1.00  0.00
ATOM   1526  HN  SER   93     -16.649   8.919   1.417  1.00  0.00
ATOM   1527  CA  SER   93     -16.725   8.412   3.463  1.00  0.00
ATOM   1528  HA  SER   93     -17.495   8.899   4.042  1.00  0.00
ATOM   1529  CB  SER   93     -17.234   7.048   2.986  1.00  0.00
ATOM   1530  HB1 SER   93     -17.222   6.350   3.809  1.00  0.00
ATOM   1531  HB2 SER   93     -18.243   7.152   2.615  1.00  0.00
ATOM   1532  OG  SER   93     -16.418   6.536   1.947  1.00  0.00
ATOM   1533  HG  SER   93     -16.849   6.678   1.101  1.00  0.00
ATOM   1534  C   SER   93     -15.490   8.232   4.335  1.00  0.00
ATOM   1535  O   SER   93     -14.447   8.833   4.082  1.00  0.00
ATOM   1536  N   GLU   94     -15.601   7.370   5.338  1.00  0.00
ATOM   1537  HN  GLU   94     -16.455   6.913   5.485  1.00  0.00
ATOM   1538  CA  GLU   94     -14.485   7.092   6.230  1.00  0.00
ATOM   1539  HA  GLU   94     -14.213   8.017   6.717  1.00  0.00
ATOM   1540  CB  GLU   94     -14.901   6.073   7.292  1.00  0.00
ATOM   1541  HB1 GLU   94     -14.489   5.109   7.031  1.00  0.00
ATOM   1542  HB2 GLU   94     -15.979   6.003   7.305  1.00  0.00
ATOM   1543  CG  GLU   94     -14.430   6.427   8.693  1.00  0.00
ATOM   1544  HG1 GLU   94     -13.574   7.082   8.616  1.00  0.00
ATOM   1545  HG2 GLU   94     -15.229   6.939   9.209  1.00  0.00
ATOM   1546  CD  GLU   94     -14.035   5.207   9.502  1.00  0.00
ATOM   1547  OE1 GLU   94     -13.155   5.336  10.379  1.00  0.00
ATOM   1548  OE2 GLU   94     -14.604   4.123   9.257  1.00  0.00
ATOM   1549  C   GLU   94     -13.274   6.569   5.457  1.00  0.00
ATOM   1550  O   GLU   94     -12.160   6.551   5.979  1.00  0.00
ATOM   1551  N   TYR   95     -13.493   6.137   4.214  1.00  0.00
ATOM   1552  HN  TYR   95     -14.397   6.168   3.841  1.00  0.00
ATOM   1553  CA  TYR   95     -12.412   5.611   3.393  1.00  0.00
ATOM   1554  HA  TYR   95     -11.977   4.775   3.916  1.00  0.00
ATOM   1555  CB  TYR   95     -12.947   5.131   2.045  1.00  0.00
ATOM   1556  HB1 TYR   95     -13.630   5.870   1.653  1.00  0.00
ATOM   1557  HB2 TYR   95     -12.119   5.016   1.365  1.00  0.00
ATOM   1558  CG  TYR   95     -13.678   3.807   2.104  1.00  0.00
ATOM   1559  CD1 TYR   95     -13.724   2.972   0.996  1.00  0.00
ATOM   1560  HD1 TYR   95     -13.227   3.279   0.087  1.00  0.00
ATOM   1561  CD2 TYR   95     -14.325   3.394   3.263  1.00  0.00
ATOM   1562  HD2 TYR   95     -14.303   4.030   4.132  1.00  0.00
ATOM   1563  CE1 TYR   95     -14.390   1.762   1.040  1.00  0.00
ATOM   1564  HE1 TYR   95     -14.413   1.126   0.167  1.00  0.00
ATOM   1565  CE2 TYR   95     -14.994   2.187   3.314  1.00  0.00
ATOM   1566  HE2 TYR   95     -15.487   1.884   4.227  1.00  0.00
ATOM   1567  CZ  TYR   95     -15.023   1.374   2.202  1.00  0.00
ATOM   1568  OH  TYR   95     -15.687   0.170   2.250  1.00  0.00
ATOM   1569  HH  TYR   95     -15.095  -0.534   1.974  1.00  0.00
ATOM   1570  C   TYR   95     -11.338   6.671   3.177  1.00  0.00
ATOM   1571  O   TYR   95     -10.170   6.352   2.951  1.00  0.00
ATOM   1572  N   TYR   96     -11.743   7.934   3.243  1.00  0.00
ATOM   1573  HN  TYR   96     -12.686   8.125   3.432  1.00  0.00
ATOM   1574  CA  TYR   96     -10.816   9.045   3.073  1.00  0.00
ATOM   1575  HA  TYR   96     -10.140   8.795   2.268  1.00  0.00
ATOM   1576  CB  TYR   96     -11.579  10.321   2.712  1.00  0.00
ATOM   1577  HB1 TYR   96     -12.376  10.073   2.027  1.00  0.00
ATOM   1578  HB2 TYR   96     -12.001  10.745   3.611  1.00  0.00
ATOM   1579  CG  TYR   96     -10.717  11.378   2.060  1.00  0.00
ATOM   1580  CD1 TYR   96     -10.257  11.219   0.759  1.00  0.00
ATOM   1581  HD1 TYR   96     -10.524  10.326   0.213  1.00  0.00
ATOM   1582  CD2 TYR   96     -10.364  12.533   2.745  1.00  0.00
ATOM   1583  HD2 TYR   96     -10.714  12.672   3.758  1.00  0.00
ATOM   1584  CE1 TYR   96      -9.471  12.183   0.159  1.00  0.00
ATOM   1585  HE1 TYR   96      -9.120  12.039  -0.852  1.00  0.00
ATOM   1586  CE2 TYR   96      -9.576  13.501   2.152  1.00  0.00
ATOM   1587  HE2 TYR   96      -9.312  14.393   2.701  1.00  0.00
ATOM   1588  CZ  TYR   96      -9.131  13.320   0.859  1.00  0.00
ATOM   1589  OH  TYR   96      -8.347  14.282   0.265  1.00  0.00
ATOM   1590  HH  TYR   96      -8.832  14.690  -0.456  1.00  0.00
ATOM   1591  C   TYR   96     -10.009   9.267   4.346  1.00  0.00
ATOM   1592  O   TYR   96      -8.884   9.764   4.303  1.00  0.00
ATOM   1593  N   LYS   97     -10.593   8.888   5.478  1.00  0.00
ATOM   1594  HN  LYS   97     -11.496   8.503   5.445  1.00  0.00
ATOM   1595  CA  LYS   97      -9.937   9.050   6.771  1.00  0.00
ATOM   1596  HA  LYS   97      -9.515  10.043   6.806  1.00  0.00
ATOM   1597  CB  LYS   97     -10.960   8.901   7.898  1.00  0.00
ATOM   1598  HB1 LYS   97     -11.380   7.906   7.859  1.00  0.00
ATOM   1599  HB2 LYS   97     -10.457   9.033   8.845  1.00  0.00
ATOM   1600  CG  LYS   97     -12.100   9.903   7.820  1.00  0.00
ATOM   1601  HG1 LYS   97     -12.840   9.537   7.124  1.00  0.00
ATOM   1602  HG2 LYS   97     -11.711  10.849   7.473  1.00  0.00
ATOM   1603  CD  LYS   97     -12.756  10.107   9.176  1.00  0.00
ATOM   1604  HD1 LYS   97     -13.665  10.674   9.042  1.00  0.00
ATOM   1605  HD2 LYS   97     -12.990   9.142   9.601  1.00  0.00
ATOM   1606  CE  LYS   97     -11.842  10.857  10.131  1.00  0.00
ATOM   1607  HE1 LYS   97     -10.927  11.105   9.614  1.00  0.00
ATOM   1608  HE2 LYS   97     -11.618  10.218  10.972  1.00  0.00
ATOM   1609  NZ  LYS   97     -12.471  12.111  10.629  1.00  0.00
ATOM   1610  HZ1 LYS   97     -11.831  12.917  10.476  1.00  0.00
ATOM   1611  HZ2 LYS   97     -12.672  12.031  11.646  1.00  0.00
ATOM   1612  HZ3 LYS   97     -13.362  12.289  10.123  1.00  0.00
ATOM   1613  C   LYS   97      -8.816   8.031   6.955  1.00  0.00
ATOM   1614  O   LYS   97      -7.664   8.395   7.189  1.00  0.00
ATOM   1615  N   CYS   98      -9.167   6.753   6.861  1.00  0.00
ATOM   1616  HN  CYS   98     -10.105   6.529   6.684  1.00  0.00
ATOM   1617  CA  CYS   98      -8.203   5.671   7.039  1.00  0.00
ATOM   1618  HA  CYS   98      -7.970   5.609   8.092  1.00  0.00
ATOM   1619  CB  CYS   98      -8.816   4.348   6.588  1.00  0.00
ATOM   1620  HB1 CYS   98      -8.039   3.600   6.531  1.00  0.00
ATOM   1621  HB2 CYS   98      -9.554   4.040   7.311  1.00  0.00
ATOM   1622  SG  CYS   98      -9.627   4.426   4.976  1.00  0.00
ATOM   1623  HG  CYS   98     -10.366   5.034   5.045  1.00  0.00
ATOM   1624  C   CYS   98      -6.914   5.931   6.268  1.00  0.00
ATOM   1625  O   CYS   98      -5.817   5.796   6.814  1.00  0.00
ATOM   1626  N   ALA   99      -7.045   6.278   4.991  1.00  0.00
ATOM   1627  HN  ALA   99      -7.939   6.375   4.607  1.00  0.00
ATOM   1628  CA  ALA   99      -5.885   6.551   4.158  1.00  0.00
ATOM   1629  HA  ALA   99      -5.339   5.629   4.029  1.00  0.00
ATOM   1630  CB  ALA   99      -6.319   7.042   2.785  1.00  0.00
ATOM   1631  HB1 ALA   99      -6.855   6.255   2.275  1.00  0.00
ATOM   1632  HB2 ALA   99      -5.448   7.317   2.209  1.00  0.00
ATOM   1633  HB3 ALA   99      -6.963   7.902   2.897  1.00  0.00
ATOM   1634  C   ALA   99      -4.977   7.570   4.828  1.00  0.00
ATOM   1635  O   ALA   99      -3.764   7.398   4.871  1.00  0.00
ATOM   1636  N   ASN  100      -5.581   8.613   5.379  1.00  0.00
ATOM   1637  HN  ASN  100      -6.555   8.685   5.321  1.00  0.00
ATOM   1638  CA  ASN  100      -4.826   9.660   6.054  1.00  0.00
ATOM   1639  HA  ASN  100      -4.202  10.142   5.316  1.00  0.00
ATOM   1640  CB  ASN  100      -5.778  10.695   6.658  1.00  0.00
ATOM   1641  HB1 ASN  100      -6.720  10.660   6.130  1.00  0.00
ATOM   1642  HB2 ASN  100      -5.943  10.459   7.699  1.00  0.00
ATOM   1643  CG  ASN  100      -5.230  12.106   6.568  1.00  0.00
ATOM   1644  OD1 ASN  100      -5.097  12.798   7.577  1.00  0.00
ATOM   1645  ND2 ASN  100      -4.910  12.541   5.354  1.00  0.00
ATOM   1646 HD21 ASN  100      -4.553  13.449   5.267  1.00  0.00
ATOM   1647 HD22 ASN  100      -5.042  11.934   4.595  1.00  0.00
ATOM   1648  C   ASN  100      -3.935   9.073   7.144  1.00  0.00
ATOM   1649  O   ASN  100      -2.862   9.602   7.434  1.00  0.00
ATOM   1650  N   ILE  101      -4.386   7.975   7.743  1.00  0.00
ATOM   1651  HN  ILE  101      -5.248   7.599   7.467  1.00  0.00
ATOM   1652  CA  ILE  101      -3.630   7.318   8.803  1.00  0.00
ATOM   1653  HA  ILE  101      -3.193   8.088   9.422  1.00  0.00
ATOM   1654  CB  ILE  101      -4.541   6.453   9.691  1.00  0.00
ATOM   1655  HB  ILE  101      -4.890   5.616   9.105  1.00  0.00
ATOM   1656 CG1  ILE  101      -5.743   7.274  10.166  1.00  0.00
ATOM   1657 HG11 ILE  101      -6.325   7.575   9.308  1.00  0.00
ATOM   1658 HG12 ILE  101      -5.387   8.153  10.682  1.00  0.00
ATOM   1659 CG2  ILE  101      -3.761   5.909  10.879  1.00  0.00
ATOM   1660 HG21 ILE  101      -4.431   5.373  11.534  1.00  0.00
ATOM   1661 HG22 ILE  101      -3.308   6.727  11.418  1.00  0.00
ATOM   1662 HG23 ILE  101      -2.990   5.240  10.526  1.00  0.00
ATOM   1663  CD1  ILE  101      -6.658   6.523  11.107  1.00  0.00
ATOM   1664 HD11 ILE  101      -7.168   7.226  11.749  1.00  0.00
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REPLACEMENT SHEET

ATOM	1665	HD12	ILE	101	-6.075	5.842	11.709	1.00	0.00
ATOM	1666	HD13	ILE	101	-7.384	5.966	10.534	1.00	0.00
ATOM	1667	C	ILE	101	-2.511	6.457	8.226	1.00	0.00
ATOM	1668	O	ILE	101	-1.335	6.807	8.332	1.00	0.00
ATOM	1669	N	LEU	102	-2.876	5.343	7.590	1.00	0.00
ATOM	1670	HN	LEU	102	-3.829	5.117	7.527	1.00	0.00
ATOM	1671	CA	LEU	102	-1.886	4.457	6.972	1.00	0.00
ATOM	1672	HA	LEU	102	-1.350	3.953	7.763	1.00	0.00
ATOM	1673	CB	LEU	102	-2.569	3.416	6.082	1.00	0.00
ATOM	1674	HB1	LEU	102	-3.630	3.443	6.283	1.00	0.00
ATOM	1675	HB2	LEU	102	-2.408	3.700	5.053	1.00	0.00
ATOM	1676	CG	LEU	102	-2.083	1.971	6.260	1.00	0.00
ATOM	1677	HG	LEU	102	-2.423	1.382	5.420	1.00	0.00
ATOM	1678	CD1	LEU	102	-2.676	1.364	7.523	1.00	0.00
ATOM	1679	HD11	LEU	102	-1.943	1.395	8.316	1.00	0.00
ATOM	1680	HD12	LEU	102	-2.958	0.338	7.332	1.00	0.00
ATOM	1681	HD13	LEU	102	-3.549	1.928	7.818	1.00	0.00
ATOM	1682	CD2	LEU	102	-0.559	1.903	6.290	1.00	0.00
ATOM	1683	HD21	LEU	102	-0.147	2.788	5.827	1.00	0.00
ATOM	1684	HD22	LEU	102	-0.224	1.027	5.749	1.00	0.00
ATOM	1685	HD23	LEU	102	-0.220	1.841	7.313	1.00	0.00
ATOM	1686	C	LEU	102	-0.897	5.265	6.139	1.00	0.00
ATOM	1687	O	LEU	102	0.301	4.991	6.137	1.00	0.00
ATOM	1688	N	GLU	103	-1.414	6.266	5.433	1.00	0.00
ATOM	1689	HN	GLU	103	-2.377	6.439	5.484	1.00	0.00
ATOM	1690	CA	GLU	103	-0.581	7.132	4.612	1.00	0.00
ATOM	1691	HA	GLU	103	-0.056	6.514	3.900	1.00	0.00
ATOM	1692	CB	GLU	103	-1.446	8.146	3.857	1.00	0.00
ATOM	1693	HB1	GLU	103	-1.912	8.808	4.572	1.00	0.00
ATOM	1694	HB2	GLU	103	-2.220	7.612	3.320	1.00	0.00
ATOM	1695	CG	GLU	103	-0.670	8.991	2.860	1.00	0.00
ATOM	1696	HG1	GLU	103	-1.083	8.832	1.874	1.00	0.00
ATOM	1697	HG2	GLU	103	0.364	8.680	2.871	1.00	0.00
ATOM	1698	CD	GLU	103	-0.734	10.472	3.178	1.00	0.00
ATOM	1699	OE1	GLU	103	-1.856	10.996	3.342	1.00	0.00
ATOM	1700	OE2	GLU	103	0.337	11.108	3.264	1.00	0.00
ATOM	1701	C	GLU	103	0.439	7.858	5.478	1.00	0.00
ATOM	1702	O	GLU	103	1.644	7.658	5.334	1.00	0.00
ATOM	1703	N	LYS	104	-0.052	8.675	6.405	1.00	0.00
ATOM	1704	HN	LYS	104	-1.024	8.786	6.480	1.00	0.00
ATOM	1705	CA	LYS	104	0.821	9.417	7.306	1.00	0.00
ATOM	1706	HA	LYS	104	1.329	10.172	6.725	1.00	0.00
ATOM	1707	CB	LYS	104	-0.003	10.100	8.399	1.00	0.00
ATOM	1708	HB1	LYS	104	-0.949	9.589	8.492	1.00	0.00
ATOM	1709	HB2	LYS	104	0.530	10.024	9.335	1.00	0.00
ATOM	1710	CG	LYS	104	-0.278	11.569	8.125	1.00	0.00
ATOM	1711	HG1	LYS	104	0.635	12.128	8.261	1.00	0.00
ATOM	1712	HG2	LYS	104	-1.026	11.920	8.820	1.00	0.00
ATOM	1713	CD	LYS	104	-0.782	11.786	6.708	1.00	0.00
ATOM	1714	HD1	LYS	104	-0.960	10.824	6.248	1.00	0.00
ATOM	1715	HD2	LYS	104	-0.031	12.322	6.147	1.00	0.00
ATOM	1716	CE	LYS	104	-2.073	12.589	6.695	1.00	0.00
ATOM	1717	HE1	LYS	104	-2.601	12.384	5.775	1.00	0.00
ATOM	1718	HE2	LYS	104	-2.680	12.283	7.534	1.00	0.00
ATOM	1719	NZ	LYS	104	-1.817	14.053	6.791	1.00	0.00
ATOM	1720	HZ1	LYS	104	-2.239	14.433	7.661	1.00	0.00
ATOM	1721	HZ2	LYS	104	-2.233	14.543	5.973	1.00	0.00
ATOM	1722	HZ3	LYS	104	-0.793	14.236	6.806	1.00	0.00
ATOM	1723	C	LYS	104	1.860	8.497	7.941	1.00	0.00
ATOM	1724	O	LYS	104	2.995	8.903	8.184	1.00	0.00
ATOM	1725	N	PHE	105	1.460	7.259	8.213	1.00	0.00
ATOM	1726	HN	PHE	105	0.540	6.997	7.997	1.00	0.00
ATOM	1727	CA	PHE	105	2.351	6.279	8.824	1.00	0.00
ATOM	1728	HA	PHE	105	2.951	6.790	9.562	1.00	0.00
ATOM	1729	CB	PHE	105	1.536	5.184	9.515	1.00	0.00
ATOM	1730	HB1	PHE	105	2.007	4.228	9.338	1.00	0.00
ATOM	1731	HB2	PHE	105	0.540	5.171	9.097	1.00	0.00
ATOM	1732	CG	PHE	105	1.411	5.369	11.001	1.00	0.00
ATOM	1733	CD1	PHE	105	0.521	6.294	11.524	1.00	0.00
ATOM	1734	HD1	PHE	105	-0.083	6.887	10.853	1.00	0.00
ATOM	1735	CD2	PHE	105	2.177	4.614	11.874	1.00	0.00
ATOM	1736	HD2	PHE	105	2.872	3.889	11.478	1.00	0.00
ATOM	1737	CE1	PHE	105	0.400	6.465	12.890	1.00	0.00
ATOM	1738	HE1	PHE	105	-0.296	7.190	13.285	1.00	0.00
ATOM	1739	CE2	PHE	105	2.061	4.780	13.241	1.00	0.00
ATOM	1740	HE2	PHE	105	2.665	4.186	13.911	1.00	0.00
ATOM	1741	CZ	PHE	105	1.172	5.707	13.750	1.00	0.00
ATOM	1742	HZ	PHE	105	1.079	5.838	14.818	1.00	0.00
ATOM	1743	C	PHE	105	3.279	5.655	7.785	1.00	0.00
ATOM	1744	O	PHE	105	4.491	5.871	7.808	1.00	0.00
ATOM	1745	N	PHE	106	2.702	4.870	6.882	1.00	0.00
ATOM	1746	HN	PHE	106	1.732	4.732	6.922	1.00	0.00
ATOM	1747	CA	PHE	106	3.470	4.199	5.841	1.00	0.00
ATOM	1748	HA	PHE	106	4.078	3.441	6.316	1.00	0.00
ATOM	1749	CB	PHE	106	2.532	3.526	4.839	1.00	0.00
ATOM	1750	HB1	PHE	106	1.881	2.844	5.366	1.00	0.00
ATOM	1751	HB2	PHE	106	1.937	4.281	4.351	1.00	0.00
ATOM	1752	CG	PHE	106	3.254	2.755	3.777	1.00	0.00
ATOM	1753	CD1	PHE	106	3.931	1.590	4.091	1.00	0.00
ATOM	1754	HD1	PHE	106	3.928	1.235	5.109	1.00	0.00
ATOM	1755	CD2	PHE	106	3.267	3.202	2.469	1.00	0.00
ATOM	1756	HD2	PHE	106	2.743	4.111	2.214	1.00	0.00
ATOM	1757	CE1	PHE	106	4.601	0.879	3.118	1.00	0.00
ATOM	1758	HE1	PHE	106	5.122	-0.029	3.376	1.00	0.00
ATOM	1759	CE2	PHE	106	3.941	2.500	1.491	1.00	0.00
ATOM	1760	HE2	PHE	106	3.935	2.853	0.471	1.00	0.00
ATOM	1761	CZ	PHE	106	4.605	1.334	1.814	1.00	0.00
ATOM	1762	HZ	PHE	106	5.125	0.780	1.050	1.00	0.00
ATOM	1763	C	PHE	106	4.388	5.173	5.110	1.00	0.00
ATOM	1764	O	PHE	106	5.610	5.033	5.148	1.00	0.00
ATOM	1765	N	PHE	107	3.795	6.155	4.434	1.00	0.00
ATOM	1766	HN	PHE	107	2.814	6.212	4.432	1.00	0.00
ATOM	1767	CA	PHE	107	4.575	7.140	3.686	1.00	0.00
ATOM	1768	HA	PHE	107	5.076	6.616	2.885	1.00	0.00
ATOM	1769	CB	PHE	107	3.662	8.212	3.077	1.00	0.00
ATOM	1770	HB1	PHE	107	2.932	8.510	3.811	1.00	0.00
ATOM	1771	HB2	PHE	107	4.263	9.070	2.810	1.00	0.00
ATOM	1772	CG	PHE	107	2.918	7.770	1.838	1.00	0.00
ATOM	1773	CD1	PHE	107	3.038	6.475	1.348	1.00	0.00
ATOM	1774	HD1	PHE	107	3.674	5.771	1.863	1.00	0.00
ATOM	1775	CD2	PHE	107	2.098	8.660	1.160	1.00	0.00
ATOM	1776	HD2	PHE	107	1.995	9.670	1.528	1.00	0.00
ATOM	1777	CE1	PHE	107	2.356	6.080	0.214	1.00	0.00
ATOM	1778	HE1	PHE	107	2.460	5.069	-0.154	1.00	0.00
ATOM	1779	CE2	PHE	107	1.413	8.268	0.025	1.00	0.00
ATOM	1780	HE2	PHE	107	0.777	8.972	-0.492	1.00	0.00
ATOM	1781	CZ	PHE	107	1.542	6.977	-0.449	1.00	0.00
ATOM	1782	HZ	PHE	107	1.007	6.669	-1.336	1.00	0.00
ATOM	1783	C	PHE	107	5.636	7.787	4.571	1.00	0.00
ATOM	1784	O	PHE	107	6.638	8.301	4.075	1.00	0.00
ATOM	1785	N	SER	108	5.411	7.766	5.883	1.00	0.00
ATOM	1786	HN	SER	108	4.619	7.305	6.227	1.00	0.00
ATOM	1787	CA	SER	108	6.391	8.287	6.826	1.00	0.00
ATOM	1788	HA	SER	108	6.835	9.173	6.400	1.00	0.00
ATOM	1789	CB	SER	108	5.730	8.643	8.157	1.00	0.00
ATOM	1790	HB1	SER	108	6.468	8.597	8.942	1.00	0.00
ATOM	1791	HB2	SER	108	4.940	7.938	8.364	1.00	0.00
ATOM	1792	OG	SER	108	5.181	9.949	8.121	1.00	0.00
ATOM	1793	HG	SER	108	4.501	9.993	7.445	1.00	0.00
ATOM	1794	C	SER	108	7.471	7.243	7.042	1.00	0.00
ATOM	1795	O	SER	108	8.647	7.561	7.216	1.00	0.00
ATOM	1796	N	LYS	109	7.049	5.986	6.994	1.00	0.00
ATOM	1797	HN	LYS	109	6.100	5.811	6.828	1.00	0.00
ATOM	1798	CA	LYS	109	7.953	4.860	7.124	1.00	0.00
ATOM	1799	HA	LYS	109	8.620	5.053	7.951	1.00	0.00
ATOM	1800	CB	LYS	109	7.149	3.591	7.401	1.00	0.00
ATOM	1801	HB1	LYS	109	6.255	3.607	6.795	1.00	0.00
ATOM	1802	HB2	LYS	109	7.741	2.737	7.126	1.00	0.00
ATOM	1803	CG	LYS	109	6.734	3.440	8.856	1.00	0.00
ATOM	1804	HG1	LYS	109	5.820	2.866	8.902	1.00	0.00
ATOM	1805	HG2	LYS	109	6.566	4.421	9.276	1.00	0.00
ATOM	1806	CD	LYS	109	7.802	2.732	9.670	1.00	0.00
ATOM	1807	HD1	LYS	109	8.751	3.219	9.500	1.00	0.00
ATOM	1808	HD2	LYS	109	7.544	2.794	10.717	1.00	0.00
ATOM	1809	CE	LYS	109	7.919	1.269	9.276	1.00	0.00
ATOM	1810	HE1	LYS	109	6.930	0.835	9.254	1.00	0.00
ATOM	1811	HE2	LYS	109	8.359	1.209	8.292	1.00	0.00
ATOM	1812	NZ	LYS	109	8.763	0.502	10.233	1.00	0.00
ATOM	1813	HZ1	LYS	109	8.800	-0.499	9.955	1.00	0.00
ATOM	1814	HZ2	LYS	109	8.368	0.570	11.192	1.00	0.00
ATOM	1815	HZ3	LYS	109	9.731	0.883	10.241	1.00	0.00
ATOM	1816	C	LYS	109	8.769	4.700	5.846	1.00	0.00
ATOM	1817	O	LYS	109	9.948	4.348	5.882	1.00	0.00
ATOM	1818	N	ILE	110	8.127	4.989	4.717	1.00	0.00
ATOM	1819	HN	ILE	110	7.193	5.283	4.765	1.00	0.00
ATOM	1820	CA	ILE	110	8.780	4.928	3.416	1.00	0.00
ATOM	1821	HA	ILE	110	8.993	3.891	3.187	1.00	0.00
ATOM	1822	CB	ILE	110	7.850	5.488	2.313	1.00	0.00
ATOM	1823	HB	ILE	110	7.508	6.464	2.626	1.00	0.00
ATOM	1824	CG1	ILE	110	6.640	4.570	2.129	1.00	0.00
ATOM	1825	HG11	ILE	110	5.898	5.077	1.532	1.00	0.00
ATOM	1826	HG12	ILE	110	6.221	4.342	3.093	1.00	0.00
ATOM	1827	CG2	ILE	110	8.593	5.651	0.996	1.00	0.00
ATOM	1828	HG21	ILE	110	8.729	6.702	0.786	1.00	0.00
ATOM	1829	HG22	ILE	110	8.022	5.196	0.201	1.00	0.00
ATOM	1830	HG23	ILE	110	9.556	5.169	1.070	1.00	0.00
ATOM	1831	CD1	ILE	110	6.973	3.260	1.449	1.00	0.00
ATOM	1832	HD11	ILE	110	6.748	2.442	2.117	1.00	0.00
ATOM	1833	HD12	ILE	110	8.023	3.242	1.201	1.00	0.00
ATOM	1834	HD13	ILE	110	6.388	3.162	0.548	1.00	0.00
ATOM	1835	C	ILE	110	10.088	5.717	3.438	1.00	0.00
ATOM	1836	O	ILE	110	11.129	5.225	3.008	1.00	0.00
ATOM	1837	N	LYS	111	10.018	6.946	3.946	1.00	0.00
ATOM	1838	HN	LYS	111	9.153	7.278	4.263	1.00	0.00
ATOM	1839	CA	LYS	111	11.184	7.828	4.017	1.00	0.00
ATOM	1840	HA	LYS	111	11.336	8.250	3.035	1.00	0.00
ATOM	1841	CB	LYS	111	10.921	8.963	5.009	1.00	0.00
ATOM	1842	HB1	LYS	111	11.572	8.840	5.861	1.00	0.00
ATOM	1843	HB2	LYS	111	9.894	8.907	5.340	1.00	0.00
ATOM	1844	CG	LYS	111	11.156	10.346	4.425	1.00	0.00
ATOM	1845	HG1	LYS	111	11.692	10.245	3.493	1.00	0.00
ATOM	1846	HG2	LYS	111	11.746	10.925	5.121	1.00	0.00
ATOM	1847	CD	LYS	111	9.847	11.073	4.164	1.00	0.00
ATOM	1848	HD1	LYS	111	10.065	12.076	3.827	1.00	0.00
ATOM	1849	HD2	LYS	111	9.280	11.114	5.083	1.00	0.00
ATOM	1850	CE	LYS	111	9.018	10.367	3.104	1.00	0.00
ATOM	1851	HE1	LYS	111	8.683	9.419	3.499	1.00	0.00
ATOM	1852	HE2	LYS	111	9.636	10.195	2.235	1.00	0.00
ATOM	1853	NZ	LYS	111	7.830	11.169	2.702	1.00	0.00
ATOM	1854	HZ1	LYS	111	7.360	11.560	3.543	1.00	0.00
ATOM	1855	HZ2	LYS	111	7.151	10.571	2.187	1.00	0.00
ATOM	1856	HZ3	LYS	111	8.121	11.954	2.084	1.00	0.00
ATOM	1857	C	LYS	111	12.448	7.070	4.425	1.00	0.00
ATOM	1858	O	LYS	111	13.491	7.199	3.785	1.00	0.00
ATOM	1859	N	GLU	112	12.347	6.285	5.491	1.00	0.00
ATOM	1860	HN	GLU	112	11.489	6.225	5.962	1.00	0.00
ATOM	1861	CA	GLU	112	13.485	5.516	5.983	1.00	0.00
ATOM	1862	HA	GLU	112	14.297	6.205	6.161	1.00	0.00
ATOM	1863	CB	GLU	112	13.126	4.819	7.296	1.00	0.00
ATOM	1864	HB1	GLU	112	12.159	4.350	7.189	1.00	0.00
ATOM	1865	HB2	GLU	112	13.864	4.058	7.500	1.00	0.00
ATOM	1866	CG	GLU	112	13.070	5.760	8.489	1.00	0.00
ATOM	1867	HG1	GLU	112	12.440	5.320	9.249	1.00	0.00
ATOM	1868	HG2	GLU	112	12.644	6.700	8.169	1.00	0.00
ATOM	1869	CD	GLU	112	14.437	6.026	9.087	1.00	0.00
ATOM	1870	OE1	GLU	112	14.842	5.277	10.001	1.00	0.00
ATOM	1871	OE2	GLU	112	15.103	6.984	8.641	1.00	0.00
ATOM	1872	C	GLU	112	13.934	4.484	4.954	1.00	0.00
ATOM	1873	O	GLU	112	15.128	4.228	4.798	1.00	0.00
ATOM	1874	N	ALA	113	12.970	3.892	4.257	1.00	0.00
ATOM	1875	HN	ALA	113	12.037	4.138	4.430	1.00	0.00
ATOM	1876	CA	ALA	113	13.263	2.883	3.245	1.00	0.00
ATOM	1877	HA	ALA	113	14.151	2.356	3.550	1.00	0.00
ATOM	1878	CB	ALA	113	12.128	1.872	3.167	1.00	0.00
ATOM	1879	HB1	ALA	113	11.209	2.380	2.915	1.00	0.00
ATOM	1880	HB2	ALA	113	12.018	1.381	4.123	1.00	0.00
ATOM	1881	HB3	ALA	113	12.353	1.136	2.409	1.00	0.00
ATOM	1882	C	ALA	113	13.513	3.512	1.873	1.00	0.00
ATOM	1883	O	ALA	113	13.917	2.823	0.936	1.00	0.00
ATOM	1884	N	GLY	114	13.276	4.818	1.753	1.00	0.00
ATOM	1885	HN	GLY	114	12.946	5.324	2.523	1.00	0.00
ATOM	1886	CA	GLY	114	13.468	5.488	0.480	1.00	0.00
ATOM	1887	HA1	GLY	114	14.518	5.464	0.226	1.00	0.00
ATOM	1888	HA2	GLY	114	13.152	6.516	0.573	1.00	0.00
ATOM	1889	C	GLY	114	12.679	4.830	-0.634	1.00	0.00
ATOM	1890	O	GLY	114	13.227	4.056	-1.417	1.00	0.00
ATOM	1891	N	LEU	115	11.383	5.123	-0.690	1.00	0.00
ATOM	1892	HN	LEU	115	11.006	5.743	-0.033	1.00	0.00
ATOM	1893	CA	LEU	115	10.508	4.534	-1.697	1.00	0.00
ATOM	1894	HA	LEU	115	11.123	4.180	-2.510	1.00	0.00
ATOM	1895	CB	LEU	115	9.724	3.363	-1.104	1.00	0.00
ATOM	1896	HB1	LEU	115	9.340	3.668	-0.144	1.00	0.00
ATOM	1897	HB2	LEU	115	8.890	3.167	-1.754	1.00	0.00
ATOM	1898	CG	LEU	115	10.497	2.058	-0.907	1.00	0.00
ATOM	1899	HG	LEU	115	9.793	1.246	-0.833	1.00	0.00
ATOM	1900	CD1	LEU	115	11.280	2.102	0.391	1.00	0.00
ATOM	1901	HD11	LEU	115	10.719	1.597	1.166	1.00	0.00
ATOM	1902	HD12	LEU	115	11.440	3.130	0.676	1.00	0.00
ATOM	1903	HD13	LEU	115	12.231	1.611	0.255	1.00	0.00
ATOM	1904	CD2	LEU	115	11.414	1.774	-2.087	1.00	0.00
ATOM	1905	HD21	LEU	115	11.066	2.313	-2.953	1.00	0.00
ATOM	1906	HD22	LEU	115	11.409	0.715	-2.298	1.00	0.00
ATOM	1907	HD23	LEU	115	12.418	2.086	-1.846	1.00	0.00
ATOM	1908	C	LEU	115	9.509	5.550	-2.237	1.00	0.00
ATOM	1909	O	LEU	115	9.388	6.653	-1.709	1.00	0.00
ATOM	1910	N	ILE	116	8.752	5.124	-3.252	1.00	0.00
ATOM	1911	HN	ILE	116	8.896	4.217	-3.594	1.00	0.00
ATOM	1912	CA	ILE	116	7.707	5.945	-3.865	1.00	0.00
ATOM	1913	HA	ILE	116	7.395	5.441	-4.768	1.00	0.00
ATOM	1914	CB	ILE	116	6.469	6.061	-2.949	1.00	0.00
ATOM	1915	HB	ILE	116	6.730	6.669	-2.097	1.00	0.00
ATOM	1916	CG1	ILE	116	6.037	4.676	-2.458	1.00	0.00
ATOM	1917	HG11	ILE	116	5.298	4.265	-3.135	1.00	0.00
ATOM	1918	HG12	ILE	116	6.898	4.026	-2.435	1.00	0.00
ATOM	1919	CG2	ILE	116	5.326	6.743	-3.681	1.00	0.00
ATOM	1920	HG21	ILE	116	5.006	7.609	-3.121	1.00	0.00
ATOM	1921	HG22	ILE	116	4.502	6.052	-3.779	1.00	0.00
ATOM	1922	HG23	ILE	116	5.659	7.050	-4.661	1.00	0.00
ATOM	1923	CD1	ILE	116	5.433	4.694	-1.073	1.00	0.00
ATOM	1924	HD11	ILE	116	6.172	5.032	-0.363	1.00	0.00
ATOM	1925	HD12	ILE	116	5.110	3.698	-0.809	1.00	0.00
ATOM	1926	HD13	ILE	116	4.586	5.363	-1.057	1.00	0.00
ATOM	1927	C	ILE	116	8.213	7.340	-4.246	1.00	0.00
ATOM	1928	O	ILE	116	8.498	7.601	-5.415	1.00	0.00
ATOM	1929	N	ASP	117	8.305	8.240	-3.268	1.00	0.00
ATOM	1930	HN	ASP	117	8.072	7.979	-2.355	1.00	0.00
ATOM	1931	CA	ASP	117	8.776	9.600	-3.515	1.00	0.00
ATOM	1932	HA	ASP	117	8.982	10.054	-2.558	1.00	0.00
ATOM	1933	CB	ASP	117	10.063	9.583	-4.345	1.00	0.00
ATOM	1934	HB1	ASP	117	9.902	10.133	-5.260	1.00	0.00
ATOM	1935	HB2	ASP	117	10.317	8.560	-4.583	1.00	0.00
ATOM	1936	CG	ASP	117	11.233	10.208	-3.610	1.00	0.00
ATOM	1937	OD1	ASP	117	11.577	11.368	-3.920	1.00	0.00
ATOM	1938	OD2	ASP	117	11.804	9.538	-2.724	1.00	0.00
ATOM	1939	C	ASP	117	7.708	10.424	-4.226	1.00	0.00
ATOM	1940	O	ASP	117	8.020	11.293	-5.041	1.00	0.00
ATOM	1941	N	LYS	118	6.448	10.150	-3.906	1.00	0.00
ATOM	1942	HN	LYS	118	6.264	9.447	-3.247	1.00	0.00
ATOM	1943	CA	LYS	118	5.332	10.869	-4.508	1.00	0.00
ATOM	1944	HA	LYS	118	5.635	11.184	-5.496	1.00	0.00
ATOM	1945	CB	LYS	118	4.114	9.952	-4.628	1.00	0.00
ATOM	1946	HB1	LYS	118	3.696	9.798	-3.644	1.00	0.00

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ATOM   1947  HB2 LYS   118       4.432   9.001  -5.028  1.00  0.00
ATOM   1948  CG  LYS   118       3.021  10.506  -5.527  1.00  0.00
ATOM   1949  HG1 LYS   118       3.175  10.140  -6.531  1.00  0.00
ATOM   1950  HG2 LYS   118       3.077  11.585  -5.522  1.00  0.00
ATOM   1951  CD  LYS   118       1.642  10.081  -5.053  1.00  0.00
ATOM   1952  HD1 LYS   118       1.422   9.100  -5.449  1.00  0.00
ATOM   1953  HD2 LYS   118       1.637  10.044  -3.974  1.00  0.00
ATOM   1954  CE  LYS   118       0.569  11.052  -5.518  1.00  0.00
ATOM   1955  HE1 LYS   118      -0.025  11.347  -4.666  1.00  0.00
ATOM   1956  HE2 LYS   118       1.048  11.922  -5.942  1.00  0.00
ATOM   1957  NZ  LYS   118      -0.324  10.443  -6.543  1.00  0.00
ATOM   1958  HZ1 LYS   118      -0.734   9.558  -6.180  1.00  0.00
ATOM   1959  HZ2 LYS   118       0.214  10.234  -7.408  1.00  0.00
ATOM   1960  HZ3 LYS   118      -1.097  11.099  -6.778  1.00  0.00
ATOM   1961  C   LYS   118       4.974  12.103  -3.687  1.00  0.00
ATOM   1962  OT1 LYS   118       4.769  13.177  -4.291  1.00  0.00
ATOM   1963  OT2 LYS   118       4.901  11.986  -2.445  1.00  0.00
END
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REPLACEMENT SHEET

Table 6

Atomic Structure Coordinates of the P/CAF Bromodomain/Acetyl-Histamine Complex

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REMARK
FILENAME="/bloch2/chris/COMPLEX_XPLOR_ARIA7/structures/it8/complex_83.*REMARK
initial random number seed: 5.960359E+10REMARK
=============================================================REMARK
overall,bonds,angles,improper,vdw,noe,cdihREMARK energies: 154.107, 9.85626,
72.1621, 0, 22.2303, 36.0151, 0.204524REMARK
=============================================================REMARK
bonds,angles,impropers,noe,cdihREMARK rms-dev.: 2.214961E-
03,0.361077,52.7899,1.40651E-02,0.249335REMARK
=============================================================REMARK
noe,  cdihREMARK violations.: 2, 0REMARK
=============================================================REMARK DATE:05-
Dec-98  15:11:47       created by user:ATOM      1  CA  ACE   200      -14.038
ATOM      2  HA1 ACE   200      -14.803   2.661  -4.705  1.00  0.00      AcH
ATOM      3  HA2 ACE   200      -13.320   1.912  -4.558  1.00  0.00      AcH
ATOM      4  HA3 ACE   200      -14.491   2.304  -5.428  1.00  0.00      AcH
ATOM      5  C   ACE   200      -13.332   3.572  -5.067  1.00  0.00      AcH
ATOM      6  O   ACE   200      -12.385   2.936  -3.376  1.00  0.00      AcH
ATOM      7  N   HIM   201      -13.773   2.238  -3.012  1.00  0.00      AcH
ATOM      8  HN  HIM   201      -13.586   3.967  -2.663  1.00  0.00      AcH
ATOM      9  CA  HIM   201      -14.521   4.875  -2.982  1.00  0.00      AcH
ATOM     10  HA1 HIM   201      -13.833   3.827  -1.417  1.00  0.00      AcH
ATOM     11  HA2 HIM   201      -15.236   3.589  -0.620  1.00  0.00      AcH
ATOM     12  CB  HIM   201      -15.268   3.025  -1.526  1.00  0.00      AcH
ATOM     13  HB1 HIM   201      -14.591   5.100  -1.055  1.00  0.00      AcH
ATOM     14  HB2 HIM   201      -15.669   5.940  -1.107  1.00  0.00      AcH
ATOM     15  CG  HIM   201      -16.397   5.009  -0.056  1.00  0.00      AcH
ATOM     16  ND1 HIM   201      -17.392   5.329  -2.010  1.00  0.00      AcH
ATOM     17  HD1 HIM   201      -17.421   6.259  -1.793  1.00  0.00      AcH
ATOM     18  CD2 HIM   201      -16.680   6.906  -1.057  1.00  0.00      AcH
ATOM     19  HD2 HIM   201      -16.026   4.756  -3.204  1.00  0.00      AcH
ATOM     20  CE1 HIM   201      -18.316   4.116  -3.779  1.00  0.00      AcH
ATOM     21  HE1 HIM   201      -19.220   6.135  -2.729  1.00  0.00      AcH
ATOM     22  NE2 HIM   201      -17.912   6.722  -2.806  1.00  0.00      AcH
ATOM     23  CA  GLY     1       27.272   5.221  -3.592  1.00  0.00      AcH
ATOM     24  HA1 GLY     1       28.103  16.667  -0.366  1.00  0.00      BrD
ATOM     25  HA2 GLY     1       26.478  16.198  -0.871  1.00  0.00      BrD
ATOM     26  C   GLY     1       27.724  15.945  -0.255  1.00  0.00      BrD
ATOM     27  O   GLY     1       28.713  17.114   1.011  1.00  0.00      BrD
ATOM     28  N   GLY     1       26.780  17.834   1.144  1.00  0.00      BrD
ATOM     29  HT1 GLY     1       25.769  17.800  -1.198  1.00  0.00      BrD
ATOM     30  HT2 GLY     1       26.911  17.963  -1.018  1.00  0.00      BrD
ATOM     31  HT3 GLY     1       27.307  17.584  -2.207  1.00  0.00      BrD
ATOM     32  N   SER     2       26.999  18.667  -0.970  1.00  0.00      BrD
ATOM     33  HN  SER     2       26.222  16.682   2.037  1.00  0.00      BrD
ATOM     34  CA  SER     2       27.328  16.110   1.866  1.00  0.00      BrD
ATOM     35  HA  SER     2       28.283  17.043   3.411  1.00  0.00      BrD
ATOM     36  CB  SER     2       26.269  17.546   3.401  1.00  0.00      BrD
ATOM     37  HB1 SER     2       26.705  17.992   3.975  1.00  0.00      BrD
ATOM     38  HB2 SER     2       25.448  18.588   4.762  1.00  0.00      BrD
ATOM     39  OG  SER     2       25.771  17.414   4.374  1.00  0.00      BrD
ATOM     40  HG  SER     2       26.478  18.857   2.969  1.00  0.00      BrD
ATOM     41  C   SER     2       27.435  19.429   2.660  1.00  0.00      BrD
ATOM     42  O   SER     2       26.900  15.801   4.290  1.00  0.00      BrD
ATOM     43  N   HIS     3       28.131  14.744   3.956  1.00  0.00      BrD
ATOM     44  HN  HIS     3       28.534  15.936   5.415  1.00  0.00      BrD
ATOM     45  CA  HIS     3       28.308  16.803   5.627  1.00  0.00      BrD
ATOM     46  HA  HIS     3       28.652  14.824   6.342  1.00  0.00      BrD
ATOM     47  CB  HIS     3       29.356  13.972   5.775  1.00  0.00      BrD
ATOM     48  HB1 HIS     3       29.337  15.176   7.399  1.00  0.00      BrD
ATOM     49  HB2 HIS     3       30.333  14.428   8.178  1.00  0.00      BrD
ATOM     50  CG  HIS     3       29.137  15.184   6.939  1.00  0.00      BrD
ATOM     51  ND1 HIS     3       28.235  16.512   8.039  1.00  0.00      BrD
ATOM     52  HD1 HIS     3       27.659  16.718   9.062  1.00  0.00      BrD
ATOM     53  CD2 HIS     3       29.710  16.035   9.465  1.00  0.00      BrD
ATOM     54  HD2 HIS     3       30.468  17.715   7.796  1.00  0.00      BrD
ATOM     55  CE1 HIS     3       28.262  17.927   7.055  1.00  0.00      BrD
ATOM     56  HE1 HIS     3       27.661  17.991   9.420  1.00  0.00      BrD
ATOM     57  NE2 HIS     3       29.148  18.442  10.196  1.00  0.00      BrD
ATOM     58  HE2 HIS     3       29.368  18.615   8.668  1.00  0.00      BrD
ATOM     59  C   HIS     3       26.991  19.568   8.725  1.00  0.00      BrD
ATOM     60  O   HIS     3       26.660  14.463   7.020  1.00  0.00      BrD
ATOM     61  N   MET     4       26.245  14.998   8.078  1.00  0.00      BrD
ATOM     62  HN  MET     4       26.563  13.551   6.405  1.00  0.00      BrD
ATOM     63  CA  MET     4       24.964  13.161   5.565  1.00  0.00      BrD
ATOM     64  HA  MET     4       25.136  13.119   6.951  1.00  0.00      BrD
ATOM     65  CB  MET     4       23.985  12.767   7.958  1.00  0.00      BrD
ATOM     66  HB1 MET     4       24.445  14.294   6.994  1.00  0.00      BrD
ATOM     67  HB2 MET     4       23.776  15.111   7.531  1.00  0.00      BrD
ATOM     68  CG  MET     4       22.665  14.612   5.984  1.00  0.00      BrD
ATOM     69  HG1 MET     4       22.754  13.962   7.672  1.00  0.00      BrD
ATOM     70  HG2 MET     4       22.461  14.176   8.727  1.00  0.00      BrD
ATOM     71  SD  MET     4       21.283  12.911   7.535  1.00  0.00      BrD
ATOM     72  CE  MET     4       22.027  14.909   7.006  1.00  0.00      BrD
ATOM     73  HE1 MET     4       22.811  16.531   6.842  1.00  0.00      BrD
ATOM     74  HE2 MET     4       21.274  16.643   7.576  1.00  0.00      BrD
ATOM     75  HE3 MET     4       22.443  17.289   7.000  1.00  0.00      BrD
ATOM     76  C   MET     4       24.376  16.638   5.851  1.00  0.00      BrD
ATOM     77  O   MET     4       24.580  11.977   6.126  1.00  0.00      BrD
ATOM     78  N   SER     5       23.650  11.906   4.914  1.00  0.00      BrD
ATOM     79  HN  SER     5       23.528  11.084   6.792  1.00  0.00      BrD
ATOM     80  CA  SER     5       23.040  11.194   7.758  1.00  0.00      BrD
ATOM     81  HA  SER     5       23.836   9.939   6.125  1.00  0.00      BrD
ATOM     82  CB  SER     5       22.177   9.303   5.767  1.00  0.00      BrD
ATOM     83  HB1 SER     5       21.179   9.148   7.111  1.00  0.00      BrD
ATOM     84  HB2 SER     5       22.136   9.560   7.123  1.00  0.00      BrD
ATOM     85  OG  SER     5       22.712   8.114   6.801  1.00  0.00      BrD
ATOM     86  HG  SER     5       23.243   9.210   8.421  1.00  0.00      BrD
ATOM     87  C   SER     5       22.194   8.428   8.588  1.00  0.00      BrD
ATOM     88  O   SER     5       21.748  10.380   4.934  1.00  0.00      BrD
ATOM     89  N   LYS     6       21.973  11.525   4.867  1.00  0.00      BrD
ATOM     90  HN  LYS     6       22.355   9.460   3.999  1.00  0.00      BrD
ATOM     91  CA  LYS     6       21.180   8.565   4.110  1.00  0.00      BrD
ATOM     92  HA  LYS     6       20.720   9.753   2.811  1.00  0.00      BrD
ATOM     93  CB  LYS     6       22.078  10.720   2.950  1.00  0.00      BrD
ATOM     94  HB1 LYS     6       21.474   9.801   1.572  1.00  0.00      BrD
ATOM     95  HB2 LYS     6       22.512  10.056   0.714  1.00  0.00      BrD
ATOM     96  CG  LYS     6       23.208   8.824   1.418  1.00  0.00      BrD
ATOM     97  HG1 LYS     6       23.164  10.813   1.677  1.00  0.00      BrD
ATOM     98  HG2 LYS     6       24.151  11.290   2.645  1.00  0.00      BrD
ATOM     99  CD  LYS     6       23.100  10.299   1.568  1.00  0.00      BrD
ATOM    100  HD1 LYS     6       22.401  11.879   0.598  1.00  0.00      BrD
ATOM    101  HD2 LYS     6       24.072  11.546  -0.155  1.00  0.00      BrD
ATOM    102  CE  LYS     6       22.618  12.024   0.150  1.00  0.00      BrD
ATOM    103  HE1 LYS     6       21.595  13.203   1.168  1.00  0.00      BrD
ATOM    104  HE2 LYS     6       22.666  13.088   1.494  1.00  0.00      BrD
ATOM    105  NZ  LYS     6       23.448  13.953   0.393  1.00  0.00      BrD
ATOM    106  HZ1 LYS     6       24.293  13.645   2.322  1.00  0.00      BrD
ATOM    107  HZ2 LYS     6       22.900  13.045   2.406  1.00  0.00      BrD
ATOM    108  HZ3 LYS     6       23.749  13.578   3.204  1.00  0.00      BrD
ATOM    109  C   LYS     6       20.085  14.632   2.189  1.00  0.00      BrD
ATOM    110  O   LYS     6       18.897   8.710   2.613  1.00  0.00      BrD
ATOM    111  N   GLU     7       20.495   9.022   2.693  1.00  0.00      BrD
ATOM    112  HN  GLU     7       21.457   7.474   2.334  1.00  0.00      BrD
ATOM    113  CA  GLU     7       19.558   7.295   2.280  1.00  0.00      BrD
ATOM    114  HA  GLU     7       20.083   6.370   2.115  1.00  0.00      BrD
ATOM    115  CB  GLU     7       19.091   5.603   1.565  1.00  0.00      BrD
ATOM    116  HB1 GLU     7       18.110   5.783   3.451  1.00  0.00      BrD
ATOM    117  HB2 GLU     7       19.777   5.354   3.317  1.00  0.00      BrD
ATOM    118  CG  GLU     7       19.014   5.003   3.745  1.00  0.00      BrD
ATOM    119  HG1 GLU     7       18.377   6.799   4.579  1.00  0.00      BrD
ATOM    120  HG2 GLU     7       20.007   7.614   4.271  1.00  0.00      BrD
ATOM    121  CD  GLU     7       18.452   7.173   4.780  1.00  0.00      BrD
ATOM    122  OE1 GLU     7       17.289   6.206   5.857  1.00  0.00      BrD
ATOM    123  OE2 GLU     7       19.176   6.511   6.192  1.00  0.00      BrD
ATOM    124  C   GLU     7       18.347   5.434   6.521  1.00  0.00      BrD
ATOM    125  O   GLU     7       17.342   6.812   1.290  1.00  0.00      BrD
ATOM    126  N   PRO     8       18.430   7.261   1.840  1.00  0.00      BrD
ATOM    127  CA  PRO     8       17.346   6.681  -0.045  1.00  0.00      BrD
ATOM    128  HA  PRO     8       16.908   7.054  -0.951  1.00  0.00      BrD
ATOM    129  CB  PRO     8       18.034   8.003  -0.677  1.00  0.00      BrD
ATOM    130  HB1 PRO     8       17.603   7.176  -2.321  1.00  0.00      BrD
ATOM    131  HB2 PRO     8       17.887   6.458  -3.004  1.00  0.00      BrD
ATOM    132  CG  PRO     8       19.488   8.174  -2.708  1.00  0.00      BrD
ATOM    133  HG1 PRO     8       19.876   6.895  -2.087  1.00  0.00      BrD
ATOM    134  HG2 PRO     8       20.034   6.286  -2.890  1.00  0.00      BrD
ATOM    135  CD  PRO     8       19.578   7.825  -2.026  1.00  0.00      BrD
ATOM    136  HD1 PRO     8       20.504   6.155  -0.784  1.00  0.00      BrD
ATOM    137  HD2 PRO     8       19.481   6.384  -0.278  1.00  0.00      BrD
ATOM    138  C   PRO     8       16.259   5.090  -0.943  1.00  0.00      BrD
ATOM    139  O   PRO     8       15.071   5.987  -1.000  1.00  0.00      BrD
ATOM    140  N   ARG     9       16.680   6.286  -0.874  1.00  0.00      BrD
ATOM    141  HN  ARG     9       17.640   4.740  -1.177  1.00  0.00      BrD
ATOM    142  CA  ARG     9       15.754   4.570  -1.269  1.00  0.00      BrD
ATOM    143  HA  ARG     9       15.272   3.617  -1.241  1.00  0.00      BrD
ATOM    144  CB  ARG     9       14.692   3.529  -0.279  1.00  0.00      BrD
ATOM    145  HB1 ARG     9       14.073   3.864  -2.314  1.00  0.00      BrD
ATOM    146  HB2 ARG     9       14.076   2.982  -2.402  1.00  0.00      BrD
ATOM    147  CG  ARG     9       15.272   4.696  -2.010  1.00  0.00      BrD
ATOM    148  HG1 ARG     9       16.153   4.176  -3.684  1.00  0.00      BrD
ATOM    149  HG2 ARG     9       15.539   3.571  -3.837  1.00  0.00      BrD
ATOM    150  CD  ARG     9       14.274   5.221  -3.721  1.00  0.00      BrD
ATOM    151  HD1 ARG     9       13.277   3.882  -4.793  1.00  0.00      BrD
ATOM    152  HD2 ARG     9       14.375   4.055  -4.417  1.00  0.00      BrD
ATOM    153  NE  ARG     9       14.493   2.848  -5.085  1.00  0.00      BrD
ATOM    154  HE  ARG     9       14.761   4.728  -5.963  1.00  0.00      BrD
ATOM    155  CZ  ARG     9       14.350   4.289  -6.797  1.00  0.00      BrD
ATOM    156  NH1 ARG     9       13.988   6.049  -5.955  1.00  0.00      BrD
ATOM    157 HH11 ARG     9       13.823   6.672  -4.842  1.00  0.00      BrD
ATOM    158 HH12 ARG     9       13.880   6.147  -4.006  1.00  0.00      BrD
ATOM    159  NH2 ARG     9       14.567   7.666  -4.837  1.00  0.00      BrD
ATOM    160 HH21 ARG     9       14.458   6.749  -7.059  1.00  0.00      BrD
ATOM    161 HH22 ARG     9       14.840   7.744  -7.051  1.00  0.00      BrD
ATOM    162  C   ARG     9       16.500   6.284  -7.901  1.00  0.00      BrD
ATOM    163  O   ARG     9       17.367   2.320  -1.538  1.00  0.00      BrD
ATOM    164  N   ASP    10       16.159   2.278  -2.410  1.00  0.00      BrD
ATOM    165  HN  ASP    10       15.462   1.267  -0.803  1.00  0.00      BrD
ATOM    166  CA  ASP    10       16.788   1.367  -0.123  1.00  0.00      BrD
ATOM    167  HA  ASP    10       17.625   0.038  -0.988  1.00  0.00      BrD
ATOM    168  CB  ASP    10       17.296   0.088  -1.658  1.00  0.00      BrD
ATOM    169  HB1 ASP    10       18.082   0.576   0.350  1.00  0.00      BrD
ATOM    170  HB2 ASP    10       17.688   0.067   0.715  1.00  0.00      BrD
ATOM    171  CG  ASP    10       16.203   1.572   0.204  1.00  0.00      BrD
ATOM    172  OD1 ASP    10       16.210   0.641   1.399  1.00  0.00      BrD
ATOM    173  OD2 ASP    10       15.340   1.595   2.205  1.00  0.00      BrD
ATOM    174  C   ASP    10       15.803   0.262   1.413  1.00  0.00      BrD
ATOM    175  O   ASP    10       14.986   1.028  -1.606  1.00  0.00      BrD
ATOM    176  N   PRO    11       15.866   1.622  -0.903  1.00  0.00      BrD
ATOM    177  CA  PRO    11       14.974   1.218  -2.936  1.00  0.00      BrD
ATOM    178  HA  PRO    11       13.975   2.118  -3.657  1.00  0.00      BrD
ATOM    179  CB  PRO    11       14.958   2.098  -3.247  1.00  0.00      BrD
ATOM    180  HB1 PRO    11       13.973   1.540  -5.084  1.00  0.00      BrD
ATOM    181  HB2 PRO    11       15.203   1.156  -5.302  1.00  0.00      BrD
ATOM    182  CG  PRO    11       15.982   2.321  -5.789  1.00  0.00      BrD
ATOM    183  HG1 PRO    11       15.487   0.443  -5.113  1.00  0.00      BrD
ATOM    184  HG2 PRO    11       16.620   0.516  -5.149  1.00  0.00      BrD
ATOM    185  CD  PRO    11       16.792   0.564  -5.976  1.00  0.00      BrD
ATOM    186  HD1 PRO    11       17.066   0.558  -3.852  1.00  0.00      BrD
ATOM    187  HD2 PRO    11       17.671   0.418  -3.487  1.00  0.00      BrD
ATOM    188  C   PRO    11       15.488   1.163  -4.018  1.00  0.00      BrD
ATOM    189  O   PRO    11       15.551   3.554  -3.670  1.00  0.00      BrD
ATOM    190  N   ASP    12       15.849   4.191  -4.721  1.00  0.00      BrD
ATOM    191  HN  ASP    12       15.780   4.061  -2.496  1.00  0.00      BrD
ATOM    192  CA  ASP    12       16.361   3.506  -1.691  1.00  0.00      BrD
ATOM    193  HA  ASP    12       16.155   5.421  -2.384  1.00  0.00      BrD
ATOM    194  CB  ASP    12       17.873   5.927  -3.315  1.00  0.00      BrD
ATOM    195  HB1 ASP    12       18.123   5.399  -2.151  1.00  0.00      BrD
ATOM    196  HB2 ASP    12       18.167   6.112  -1.380  1.00  0.00      BrD
ATOM    197  CG  ASP    12       18.657   4.410  -1.830  1.00  0.00      BrD
ATOM    198  OD1 ASP    12       18.450   5.749  -3.400  1.00  0.00      BrD
ATOM    199  OD2 ASP    12       19.478   5.084  -4.437  1.00  0.00      BrD
ATOM    200  C   ASP    12       15.674   6.687  -3.342  1.00  0.00      BrD
ATOM    201  O   ASP    12       15.106   6.179  -1.253  1.00  0.00      BrD
ATOM    202  N   GLN    13       15.740   7.250  -1.468  1.00  0.00      BrD
ATOM    203  HN  GLN    13       16.206   5.626  -0.047  1.00  0.00      BrD
ATOM    204  CA  GLN    13       15.122   4.770   0.063  1.00  0.00      BrD
ATOM    205  HA  GLN    13       15.336   6.258   1.113  1.00  0.00      BrD
ATOM    206  CB  GLN    13       15.701   7.316   1.069  1.00  0.00      BrD
ATOM    207  HB1 GLN    13       16.666   5.684   2.405  1.00  0.00      BrD
ATOM    208  HB2 GLN    13       15.041   5.251   2.193  1.00  0.00      BrD
ATOM    209  CG  GLN    13       15.870   4.910   2.768  1.00  0.00      BrD
ATOM    210  HG1 GLN    13       15.520   6.719   3.505  1.00  0.00      BrD
ATOM    211  HG2 GLN    13       15.277   6.297   4.436  1.00  0.00      BrD
ATOM    212  CD  GLN    13       17.313   7.587   3.258  1.00  0.00      BrD
ATOM    213  OE1 GLN    13       18.036   7.150   3.683  1.00  0.00      BrD
ATOM    214  NE2 GLN    13       17.739   6.611   4.520  1.00  0.00      BrD
ATOM    215 HE21 GLN    13       18.668   8.128   2.892  1.00  0.00      BrD
ATOM    216 HE22 GLN    13       17.108   8.427   2.985  1.00  0.00      BrD
ATOM    217  C   GLN    13       13.615   8.512   2.248  1.00  0.00      BrD
ATOM    218  O   GLN    13       12.855   6.060   1.097  1.00  0.00      BrD
ATOM    219  N   LEU    14       13.191   6.950   1.478  1.00  0.00      BrD
ATOM    220  HN  LEU    14       13.848   4.880   0.662  1.00  0.00      BrD
ATOM    221  CA  LEU    14       11.774   4.214   0.371  1.00  0.00      BrD
ATOM    222  HA  LEU    14       11.303   4.558   0.595  1.00  0.00      BrD
ATOM    223  CB  LEU    14       11.581   4.943   1.487  1.00  0.00      BrD
ATOM    224  HB1 LEU    14       12.212   3.042   0.541  1.00  0.00      BrD
ATOM    225  HB2 LEU    14       10.552   2.592   1.292  1.00  0.00      BrD
ATOM    226  CG  LEU    14       11.905   2.823   0.781  1.00  0.00      BrD
ATOM    227  HG  LEU    14       12.685   2.399  -0.808  1.00  0.00      BrD
ATOM    228  CD1 LEU    14       12.409   2.967  -1.292  1.00  0.00      BrD
ATOM    229 HD11 LEU    14       11.569   0.978  -0.615  1.00  0.00      BrD
ATOM    230 HD12 LEU    14       12.986   0.311  -0.497  1.00  0.00      BrD
ATOM    231 HD13 LEU    14       13.032   0.682  -1.479  1.00  0.00      BrD
ATOM    232  CD2 LEU    14       10.682   0.934   0.266  1.00  0.00      BrD
ATOM    233 HD21 LEU    14       10.185   2.418  -1.709  1.00  0.00      BrD
ATOM    234 HD22 LEU    14       10.005   1.461  -1.660  1.00  0.00      BrD
ATOM    235 HD23 LEU    14       10.989   3.192  -1.383  1.00  0.00      BrD
ATOM    236  C   LEU    14       11.130   2.612  -2.727  1.00  0.00      BrD
ATOM    237  O   LEU    14        9.989   5.209  -0.623  1.00  0.00      BrD
ATOM    238  N   TYR    15       11.866   5.666  -0.564  1.00  0.00      BrD
ATOM    239  HN  TYR    15       12.772   5.241  -1.729  1.00  0.00      BrD
ATOM    240  CA  TYR    15       11.364   4.865  -1.714  1.00  0.00      BrD
ATOM    241  HA  TYR    15       10.539   5.841  -2.959  1.00  0.00      BrD
ATOM    242  CB  TYR    15       12.460   5.237  -3.312  1.00  0.00      BrD
ATOM    243  HB1 TYR    15       13.317   5.865  -4.029  1.00  0.00      BrD
ATOM    244  HB2 TYR    15       12.748   6.397  -3.642  1.00  0.00      BrD
ATOM    245  CG  TYR    15       12.043   4.850  -4.259  1.00  0.00      BrD
ATOM    246  CD1 TYR    15       12.993   6.533  -5.323  1.00  0.00      BrD
ATOM    247  HD1 TYR    15       14.040   7.047  -6.197  1.00  0.00      BrD
ATOM    248  CD2 TYR    15       10.702   6.968  -5.940  1.00  0.00      BrD
ATOM    249  HD2 TYR    15        9.950   6.642  -5.675  1.00  0.00      BrD
ATOM    250  CE1 TYR    15       12.620   6.248  -5.008  1.00  0.00      BrD
ATOM    251  HE1 TYR    15       13.374   7.654  -7.381  1.00  0.00      BrD
ATOM    252  CE2 TYR    15       10.322   8.049  -8.046  1.00  0.00      BrD
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REPLACEMENT SHEET

7.249	-6.857	1.00	0.00	BrD ATOM	253	HE2	TYR	15	9.275
7.326	-7.111	1.00	0.00	BrD ATOM	254	CZ	TYR	15	11.284
7.752	-7.706	1.00	0.00	BrD ATOM	255	OH	TYR	15	10.908
8.358	-8.883	1.00	0.00	BrD ATOM	256	HH	TYR	15	10.572
9.238	-8.697	1.00	0.00	BrD ATOM	257	C	TYR	15	10.859
7.253	-2.696	1.00	0.00	BrD ATOM	258	O	TYR	15	9.778
7.630	-3.146	1.00	0.00	BrD ATOM	259	N	SER	16	11.641
8.026	-1.950	1.00	0.00	BrD ATOM	260	HN	SER	16	12.485
7.666	-1.605	1.00	0.00	BrD ATOM	261	CA	SER	16	11.249
9.384	-1.602	1.00	0.00	BrD ATOM	262	HA	SER	16	11.148
9.946	-2.518	1.00	0.00	BrD ATOM	263	CB	SER	16	12.315
10.040	-0.722	1.00	0.00	BrD ATOM	264	HB1	SER	16	12.503
9.416	0.139	1.00	0.00	BrD ATOM	265	HB2	SER	16	13.227
10.155	-1.289	1.00	0.00	BrD ATOM	266	OG	SER	16	11.892
11.317	-0.276	1.00	0.00	BrD ATOM	267	HG	SER	16	12.601
11.952	-0.405	1.00	0.00	BrD ATOM	268	C	SER	16	9.909
9.370	-0.879	1.00	0.00	BrD ATOM	269	O	SER	16	9.028
10.182	-1.161	1.00	0.00	BrD ATOM	270	N	THR	17	9.756
8.420	0.038	1.00	0.00	BrD ATOM	271	HN	THR	17	10.493
7.796	0.207	1.00	0.00	BrD ATOM	272	CA	THR	17	8.514
8.269	0.785	1.00	0.00	BrD ATOM	273	HA	THR	17	8.318
9.200	1.296	1.00	0.00	BrD ATOM	274	CB	THR	17	8.656
7.146	1.820	1.00	0.00	BrD ATOM	275	HB	THR	17	9.069
6.275	1.333	1.00	0.00	BrD ATOM	276	OG1	THR	17	9.539
7.535	2.857	1.00	0.00	BrD ATOM	277	HG1	THR	17	10.426
7.633	2.502	1.00	0.00	BrD ATOM	278	CG2	THR	17	7.346
6.733	2.463	1.00	0.00	BrD ATOM	279	HG21	THR	17	6.714
7.600	2.589	1.00	0.00	BrD ATOM	280	HG22	THR	17	6.845
6.012	1.832	1.00	0.00	BrD ATOM	281	HG23	THR	17	7.545
6.289	3.427	1.00	0.00	BrD ATOM	282	C	THR	17	7.356
7.971	-0.161	1.00	0.00	BrD ATOM	283	O	THR	17	6.420
8.757	-0.277	1.00	0.00	BrD ATOM	284	N	LEU	18	7.438
6.832	-0.843	1.00	0.00	BrD ATOM	285	HN	LEU	18	8.212
6.247	-0.702	1.00	0.00	BrD ATOM	286	CA	LEU	18	6.396
6.414	-1.776	1.00	0.00	BrD ATOM	287	HA	LEU	18	5.534
6.122	-1.197	1.00	0.00	BrD ATOM	288	CB	LEU	18	6.871
5.218	-2.591	1.00	0.00	BrD ATOM	289	HB1	LEU	18	7.669
5.542	-3.243	1.00	0.00	BrD ATOM	290	HB2	LEU	18	6.049
4.869	-3.198	1.00	0.00	BrD ATOM	291	CG	LEU	18	7.377
4.056	-1.750	1.00	0.00	BrD ATOM	292	HG	LEU	18	8.301
4.350	-1.275	1.00	0.00	BrD ATOM	293	CD1	LEU	18	7.653
2.840	-2.622	1.00	0.00	BrD ATOM	294	HD11	LEU	18	6.966
2.832	-3.455	1.00	0.00	BrD ATOM	295	HD12	LEU	18	8.667
2.885	-2.994	1.00	0.00	BrD ATOM	296	HD13	LEU	18	7.523
1.941	-2.039	1.00	0.00	BrD ATOM	297	CD2	LEU	18	6.369
3.727	-0.658	1.00	0.00	BrD ATOM	298	HD21	LEU	18	5.417
4.180	-0.897	1.00	0.00	BrD ATOM	299	HD22	LEU	18	6.252
2.657	-0.584	1.00	0.00	BrD ATOM	300	HD23	LEU	18	6.722
4.117	0.284	1.00	0.00	BrD ATOM	301	C	LEU	18	5.998
7.542	-2.707	1.00	0.00	BrD ATOM	302	O	LEU	18	4.869
8.021	-2.667	1.00	0.00	BrD ATOM	303	N	LYS	19	6.926
7.967	-3.552	1.00	0.00	BrD ATOM	304	HN	LYS	19	7.813
7.550	-3.543	1.00	0.00	BrD ATOM	305	CA	LYS	19	6.648
9.050	-4.487	1.00	0.00	BrD ATOM	306	HA	LYS	19	5.959
8.673	-5.228	1.00	0.00	BrD ATOM	307	CB	LYS	19	7.935
9.498	-5.193	1.00	0.00	BrD ATOM	308	HB1	LYS	19	7.671
9.974	-6.126	1.00	0.00	BrD ATOM	309	HB2	LYS	19	8.535
8.625	-5.404	1.00	0.00	BrD ATOM	310	CG	LYS	19	8.785
10.472	-4.390	1.00	0.00	BrD ATOM	311	HG1	LYS	19	8.296
11.438	-4.386	1.00	0.00	BrD ATOM	312	HG2	LYS	19	8.878
10.106	-3.378	1.00	0.00	BrD ATOM	313	CD	LYS	19	10.172
10.621	-4.992	1.00	0.00	BrD ATOM	314	HD1	LYS	19	10.575
9.638	-5.190	1.00	0.00	BrD ATOM	315	HD2	LYS	19	10.807
11.137	-4.287	1.00	0.00	BrD ATOM	316	CE	LYS	19	10.133
11.409	-6.290	1.00	0.00	BrD ATOM	317	HE1	LYS	19	9.337
11.019	-6.908	1.00	0.00	BrD ATOM	318	HE2	LYS	19	11.077
11.288	-6.800	1.00	0.00	BrD ATOM	319	NZ	LYS	19	9.893
12.858	-6.050	1.00	0.00	BrD ATOM	320	HZ1	LYS	19	9.982
13.072	-5.036	1.00	0.00	BrD ATOM	321	HZ2	LYS	19	10.587
13.427	-6.576	1.00	0.00	BrD ATOM	322	HZ3	LYS	19	8.937
13.119	-6.366	1.00	0.00	BrD ATOM	323	C	LYS	19	5.988
10.223	-3.761	1.00	0.00	BrD ATOM	324	O	LYS	19	5.193
10.960	-4.341	1.00	0.00	BrD ATOM	325	N	SER	20	6.299
10.359	-2.474	1.00	0.00	BrD ATOM	326	HN	SER	20	6.925
9.721	-2.061	1.00	0.00	BrD ATOM	327	CA	SER	20	5.722
11.425	-1.661	1.00	0.00	BrD ATOM	328	HA	SER	20	5.660
12.306	-2.277	1.00	0.00	BrD ATOM	329	CB	SER	20	6.608
11.725	-0.449	1.00	0.00	BrD ATOM	330	HB1	SER	20	7.086
10.815	-0.120	1.00	0.00	BrD ATOM	331	HB2	SER	20	5.999
12.121	0.350	1.00	0.00	BrD ATOM	332	OG	SER	20	7.610
12.674	-0.772	1.00	0.00	BrD ATOM	333	HG	SER	20	7.218
13.396	-1.269	1.00	0.00	BrD ATOM	334	C	SER	20	4.316
11.056	-1.207	1.00	0.00	BrD ATOM	335	O	SER	20	3.334
11.659	-1.642	1.00	0.00	BrD ATOM	336	N	ILE	21	4.218
10.045	-0.349	1.00	0.00	BrD ATOM	337	HN	ILE	21	5.031
9.592	-0.044	1.00	0.00	BrD ATOM	338	CA	ILE	21	2.919
9.583	0.129	1.00	0.00	BrD ATOM	339	HA	ILE	21	2.508
10.348	0.771	1.00	0.00	BrD ATOM	340	CB	ILE	21	3.036
8.280	0.945	1.00	0.00	BrD ATOM	341	HB	ILE	21	2.050
7.850	1.036	1.00	0.00	BrD ATOM	342	CG1	ILE	21	3.956
7.280	0.240	1.00	0.00	BrD ATOM	343	HG11	ILE	21	4.639
6.858	0.962	1.00	0.00	BrD ATOM	344	HG12	ILE	21	4.519
7.792	-0.521	1.00	0.00	BrD ATOM	345	CG2	ILE	21	3.549
8.579	2.346	1.00	0.00	BrD ATOM	346	HG21	ILE	21	4.618
8.431	2.377	1.00	0.00	BrD ATOM	347	HG22	ILE	21	3.319
9.603	2.603	1.00	0.00	BrD ATOM	348	HG23	ILE	21	3.073
7.915	3.053	1.00	0.00	BrD ATOM	349	CD1	ILE	21	3.222
6.140	-0.427	1.00	0.00	BrD ATOM	350	HD11	ILE	21	3.805
5.235	-0.338	1.00	0.00	BrD ATOM	351	HD12	ILE	21	2.264
6.000	0.051	1.00	0.00	BrD ATOM	352	HD13	ILE	21	3.075
6.371	-1.472	1.00	0.00	BrD ATOM	353	C	ILE	21	1.969
9.361	-1.044	1.00	0.00	BrD ATOM	354	O	ILE	21	0.869
9.901	-1.074	1.00	0.00	BrD ATOM	355	N	LEU	22	2.433
8.608	-2.034	1.00	0.00	BrD ATOM	356	HN	LEU	22	3.325
8.224	-1.957	1.00	0.00	BrD ATOM	357	CA	LEU	22	1.648
8.337	-3.229	1.00	0.00	BrD ATOM	358	HA	LEU	22	0.757
7.807	-2.929	1.00	0.00	BrD ATOM	359	CB	LEU	22	2.451
7.465	-4.197	1.00	0.00	BrD ATOM	360	HB1	LEU	22	3.352
7.996	-4.462	1.00	0.00	BrD ATOM	361	HB2	LEU	22	2.728
6.556	-3.683	1.00	0.00	BrD ATOM	362	CG	LEU	22	1.722
7.084	-5.486	1.00	0.00	BrD ATOM	363	HG	LEU	22	1.378
7.982	-5.977	1.00	0.00	BrD ATOM	364	CD1	LEU	22	2.665
6.362	-6.437	1.00	0.00	BrD ATOM	365	HD11	LEU	22	2.220
6.314	-7.419	1.00	0.00	BrD ATOM	366	HD12	LEU	22	3.601
6.898	-6.492	1.00	0.00	BrD ATOM	367	HD13	LEU	22	2.845
5.361	-6.074	1.00	0.00	BrD ATOM	368	CD2	LEU	22	0.507
6.232	-5.178	1.00	0.00	BrD ATOM	369	HD21	LEU	22	0.127
6.472	-4.199	1.00	0.00	BrD ATOM	370	HD22	LEU	22	-0.259
6.401	-5.918	1.00	0.00	BrD ATOM	371	HD23	LEU	22	0.790
5.180	-5.199	1.00	0.00	BrD ATOM	372	C	LEU	22	1.243
9.636	-3.915	1.00	0.00	BrD ATOM	373	O	LEU	22	0.086
9.813	-4.295	1.00	0.00	BrD ATOM	374	N	GLN	23	2.201
10.552	-4.058	1.00	0.00	BrD ATOM	375	HN	GLN	23	3.107
10.354	-3.735	1.00	0.00	BrD ATOM	376	CA	GLN	23	1.941
11.841	-4.693	1.00	0.00	BrD ATOM	377	HA	GLN	23	1.828
11.670	-5.754	1.00	0.00	BrD ATOM	378	CB	GLN	23	3.118
12.793	-4.464	1.00	0.00	BrD ATOM	379	HB1	GLN	23	3.720
12.412	-3.653	1.00	0.00	BrD ATOM	380	HB2	GLN	23	2.731
13.763	-4.186	1.00	0.00	BrD ATOM	381	CG	GLN	23	4.012
12.969	-5.682	1.00	0.00	BrD ATOM	382	HG1	GLN	23	4.318
11.995	-6.035	1.00	0.00	BrD ATOM	383	HG2	GLN	23	4.886
13.535	-5.393	1.00	0.00	BrD ATOM	384	CD	GLN	23	3.316
13.697	-6.815	1.00	0.00	BrD ATOM	385	OE1	GLN	23	2.624
14.692	-6.597	1.00	0.00	BrD ATOM	386	NE2	GLN	23	3.494
13.203	-8.034	1.00	0.00	BrD ATOM	387	HE21	GLN	23	4.058
12.408	-8.134	1.00	0.00	BrD ATOM	388	HE22	GLN	23	3.055
13.654	-8.786	1.00	0.00	BrD ATOM	389	C	GLN	23	0.655
12.467	-4.157	1.00	0.00	BrD ATOM	390	O	GLN	23	-0.207
12.892	-4.925	1.00	0.00	BrD ATOM	391	N	GLN	24	0.530
12.519	-2.833	1.00	0.00	BrD ATOM	392	HN	GLN	24	1.252
12.167	-2.269	1.00	0.00	BrD ATOM	393	CA	GLN	24	-0.654
13.096	-2.203	1.00	0.00	BrD ATOM	394	HA	GLN	24	-0.951
13.947	-2.797	1.00	0.00	BrD ATOM	395	CB	GLN	24	-0.325
13.584	-0.783	1.00	0.00	BrD ATOM	396	HB1	GLN	24	0.666
14.012	-0.785	1.00	0.00	BrD ATOM	397	HB2	GLN	24	-1.035
14.351	-0.509	1.00	0.00	BrD ATOM	398	CG	GLN	24	-0.369
12.498	0.284	1.00	0.00	BrD ATOM	399	HG1	GLN	24	-1.331
12.531	0.774	1.00	0.00	BrD ATOM	400	HG2	GLN	24	-0.243
11.539	-0.192	1.00	0.00	BrD ATOM	401	CD	GLN	24	0.714
12.663	1.333	1.00	0.00	BrD ATOM	402	OE1	GLN	24	0.426
12.791	2.524	1.00	0.00	BrD ATOM	403	NE2	GLN	24	1.967
12.659	0.897	1.00	0.00	BrD ATOM	404	HE21	GLN	24	2.122
12.552	-0.065	1.00	0.00	BrD ATOM	405	HE22	GLN	24	2.687
12.763	1.554	1.00	0.00	BrD ATOM	406	C	GLN	24	-1.816
12.099	-2.179	1.00	0.00	BrD ATOM	407	O	GLN	24	-2.974
12.485	-2.331	1.00	0.00	BrD ATOM	408	N	VAL	25	-1.501
10.821	-1.974	1.00	0.00	BrD ATOM	409	HN	VAL	25	-0.561
10.575	-1.859	1.00	0.00	BrD ATOM	410	CA	VAL	25	-2.523
9.776	-1.922	1.00	0.00	BrD ATOM	411	HA	VAL	25	-3.121
9.941	-1.036	1.00	0.00	BrD ATOM	412	CB	VAL	25	-1.890
8.369	-1.813	1.00	0.00	BrD ATOM	413	HB	VAL	25	-1.198
8.243	-2.632	1.00	0.00	BrD ATOM	414	CG1	VAL	25	-1.116
8.236	-0.510	1.00	0.00	BrD ATOM	415	HG11	VAL	25	-1.590
7.494	0.116	1.00	0.00	BrD ATOM	416	HG12	VAL	25	-0.102
7.932	-0.722	1.00	0.00	BrD ATOM	417	HG13	VAL	25	-1.108
9.186	0.003	1.00	0.00	BrD ATOM	418	CG2	VAL	25	-2.945
7.277	-1.908	1.00	0.00	BrD ATOM	419	HG21	VAL	25	-3.437
7.331	-2.868	1.00	0.00	BrD ATOM	420	HG22	VAL	25	-2.472
6.313	-1.799	1.00	0.00	BrD ATOM	421	HG23	VAL	25	-3.672
7.410	-1.121	1.00	0.00	BrD ATOM	422	C	VAL	25	-3.440
9.846	-3.141	1.00	0.00	BrD ATOM	423	O	VAL	25	-4.659
9.930	-3.000	1.00	0.00	BrD ATOM	424	N	LYS	26	-2.858
9.858	-4.336	1.00	0.00	BrD ATOM	425	HN	LYS	26	-1.883
9.798	-4.396	1.00	0.00	BrD ATOM	426	CA	LYS	26	-3.648
9.943	-5.562	1.00	0.00	BrD ATOM	427	HA	LYS	26	-4.174
9.008	-5.678	1.00	0.00	BrD ATOM	428	CB	LYS	26	-2.737
10.161	-6.771	1.00	0.00	BrD ATOM	429	HB1	LYS	26	-3.314
10.018	-7.673	1.00	0.00	BrD ATOM	430	HB2	LYS	26	-1.942
9.430	-6.744	1.00	0.00	BrD ATOM	431	CG	LYS	26	-2.111
11.545	-6.820	1.00	0.00	BrD ATOM	432	HG1	LYS	26	-2.070
11.947	-5.818	1.00	0.00	BrD ATOM	433	HG2	LYS	26	-2.721
12.183	-7.442	1.00	0.00	BrD ATOM	434	CD	LYS	26	-0.702
11.500	-7.391	1.00	0.00	BrD ATOM	435	HD1	LYS	26	-0.214
10.600	-7.048	1.00	0.00	BrD ATOM	436	HD2	LYS	26	-0.156
12.364	-7.043	1.00	0.00	BrD ATOM	437	CE	LYS	26	-0.716
11.505	-8.910	1.00	0.00	BrD ATOM	438	HE1	LYS	26	0.003
10.782	-9.266	1.00	0.00	BrD ATOM	439	HE2	LYS	26	-1.703
11.228	-9.249	1.00	0.00	BrD ATOM	440	NZ	LYS	26	-0.371
12.844	-9.465	1.00	0.00	BrD ATOM	441	HZ1	LYS	26	-1.215
13.285	-9.884	1.00	0.00	BrD ATOM	442	HZ2	LYS	26	-0.010
13.461	-8.710	1.00	0.00	BrD ATOM	443	HZ3	LYS	26	0.358
12.749	-10.199	1.00	0.00	BrD ATOM	444	C	LYS	26	-4.673
11.073	-5.468	1.00	0.00	BrD ATOM	445	O	LYS	26	-5.762
10.991	-6.036	1.00	0.00	BrD ATOM	446	N	SER	27	-4.315
12.118	-4.732	1.00	0.00	BrD ATOM	447	HN	SER	27	-3.439
12.109	-4.293	1.00	0.00	BrD ATOM	448	CA	SER	27	-5.204
13.257	-4.516	1.00	0.00	BrD ATOM	449	HA	SER	27	-6.104
13.100	-5.091	1.00	0.00	BrD ATOM	450	CB	SER	27	-4.532
14.553	-4.976	1.00	0.00	BrD ATOM	451	HB1	SER	27	-3.629
14.710	-4.404	1.00	0.00	BrD ATOM	452	HB2	SER	27	-5.207
15.381	-4.818	1.00	0.00	BrD ATOM	453	OG	SER	27	-4.197
14.492	-6.351	1.00	0.00	BrD ATOM	454	HG	SER	27	-3.746
15.300	-6.606	1.00	0.00	BrD ATOM	455	C	SER	27	-5.591
13.361	-3.050	1.00	0.00	BrD ATOM	456	O	SER	27	-5.962
14.431	-2.567	1.00	0.00	BrD ATOM	457	N	HIS	28	-5.477
12.246	-2.339	1.00	0.00	BrD ATOM	458	HN	HIS	28	-5.215
11.418	-2.785	1.00	0.00	BrD ATOM	459	CA	HIS	28	-5.863
12.197	-0.946	1.00	0.00	BrD ATOM	460	HA	HIS	28	-5.597
13.142	-0.497	1.00	0.00	BrD ATOM	461	CB	HIS	28	-5.125
11.076	-0.217	1.00	0.00	BrD ATOM	462	HB1	HIS	28	-4.073
11.308	-0.210	1.00	0.00	BrD ATOM	463	HB2	HIS	28	-5.283
10.146	-0.742	1.00	0.00	BrD ATOM	464	CG	HIS	28	-5.549
10.884	1.205	1.00	0.00	BrD ATOM	465	ND1	HIS	28	-5.742
11.931	2.081	1.00	0.00	BrD ATOM	466	HD1	HIS	28	-5.645
12.883	1.866	1.00	0.00	BrD ATOM	467	CD2	HIS	28	-5.780
9.754	1.916	1.00	0.00	BrD ATOM	468	HD2	HIS	28	-5.717
8.739	1.549	1.00	0.00	BrD ATOM	469	CE1	HIS	28	-6.092
11.456	3.262	1.00	0.00	BrD ATOM	470	HE1	HIS	28	-6.314
12.044	4.141	1.00	0.00	BrD ATOM	471	NE2	HIS	28	-6.119
10.139	3.189	1.00	0.00	BrD ATOM	472	HE2	HIS	28	-6.350
9.536	3.925	1.00	0.00	BrD ATOM	473	C	HIS	28	-7.364
12.017	-0.850	1.00	0.00	BrD ATOM	474	O	HIS	28	-7.979
11.356	-1.686	1.00	0.00	BrD ATOM	475	N	GLN	29	-7.954
12.666	0.128	1.00	0.00	BrD ATOM	476	HN	GLN	29	-7.404
13.189	0.747	1.00	0.00	BrD ATOM	477	CA	GLN	29	-9.397
12.630	0.298	1.00	0.00	BrD ATOM	478	HA	GLN	29	-9.836
12.688	-0.687	1.00	0.00	BrD ATOM	479	CB	GLN	29	-9.840
13.850	1.090	1.00	0.00	BrD ATOM	480	HB1	GLN	29	-9.485
13.761	2.106	1.00	0.00	BrD ATOM	481	HB2	GLN	29	-10.918
13.901	1.092	1.00	0.00	BrD ATOM	482	CG	GLN	29	-9.294
15.138	0.496	1.00	0.00	BrD ATOM	483	HG1	GLN	29	-8.707
14.887	-0.386	1.00	0.00	BrD ATOM	484	HG2	GLN	29	-8.660
15.618	1.227	1.00	0.00	BrD ATOM	485	CD	GLN	29	-10.390
16.105	0.093	1.00	0.00	BrD ATOM	486	OE1	GLN	29	-10.358
16.679	-0.996	1.00	0.00	BrD ATOM	487	NE2	GLN	29	-11.368
16.290	0.971	1.00	0.00	BrD ATOM	488	HE21	GLN	29	-12.090
16.910	0.737	1.00	0.00	BrD ATOM	489	HE22	GLN	29	-11.329
15.800	1.819	1.00	0.00	BrD ATOM	490	C	GLN	29	-9.866
11.332	0.951	1.00	0.00	BrD ATOM	491	O	GLN	29	-11.065
11.111	1.116	1.00	0.00	BrD ATOM	492	N	SER	30	-8.921
10.450	1.262	1.00	0.00	BrD ATOM	493	HN	SER	30	-7.985
10.661	1.074	1.00	0.00	BrD ATOM	494	CA	SER	30	-9.246
9.143	1.805	1.00	0.00	BrD ATOM	495	HA	SER	30	-10.319
9.036	1.787	1.00	0.00	BrD ATOM	496	CB	SER	30	-8.759
9.026	3.250	1.00	0.00	BrD ATOM	497	HB1	SER	30	-7.829
8.479	3.271	1.00	0.00	BrD ATOM	498	HB2	SER	30	-9.499
8.500	3.835	1.00	0.00	BrD ATOM	499	OG	SER	30	-8.552
10.307	3.823	1.00	0.00	BrD ATOM	500	HG	SER	30	-9.322
10.857	3.664	1.00	0.00	BrD ATOM	501	C	SER	30	-8.627
8.036	0.945	1.00	0.00	BrD ATOM	502	O	SER	30	-8.726
6.855	1.276	1.00	0.00	BrD ATOM	503	N	ALA	31	-7.977
8.425	-0.157	1.00	0.00	BrD ATOM	504	HN	ALA	31	-7.935
9.377	-0.385	1.00	0.00	BrD ATOM	505	CA	ALA	31	-7.365
7.462	-1.066	1.00	0.00	BrD ATOM	506	HA	ALA	31	-6.927
6.675	-0.470	1.00	0.00	BrD ATOM	507	CB	ALA	31	-6.251
8.123	-1.861	1.00	0.00	BrD ATOM	508	HB1	ALA	31	-5.395
8.274	-1.223	1.00	0.00	BrD ATOM	509	HB2	ALA	31	-5.974
7.489	-2.691	1.00	0.00	BrD ATOM	510	HB3	ALA	31	-6.593
9.076	-2.236	1.00	0.00	BrD ATOM	511	C	ALA	31	-8.397
6.851	-2.014	1.00	0.00	BrD ATOM	512	O	ALA	31	-8.097
5.900	-2.736	1.00	0.00	BrD ATOM	513	N	TRP	32	-9.614
7.396	-2.010	1.00	0.00	BrD ATOM	514	HN	TRP	32	-9.795
8.160	-1.427	1.00	0.00	BrD ATOM	515	CA	TRP	32	-10.669
6.906	-2.893	1.00	0.00	BrD ATOM	516	HA	TRP	32	-10.362
7.135	-3.902	1.00	0.00	BrD ATOM	517	CB	TRP	32	-12.002
7.630	-2.628	1.00	0.00	BrD ATOM	518	HB1	TRP	32	-12.770
7.192	-3.249	1.00	0.00	BrD ATOM	519	HB2	TRP	32	-11.894
8.671	-2.881	1.00	0.00	BrD ATOM	520	CG	TRP	32	-12.454
7.544	-1.203	1.00	0.00	BrD ATOM	521	CD1	TRP	32	-12.415
8.532	-0.267	1.00	0.00	BrD ATOM	522	HD1	TRP	32	-12.058
9.535	-0.450	1.00	0.00	BrD ATOM	523	CD2	TRP	32	-12.993
6.393	-0.565	1.00	0.00	BrD ATOM	524	NE1	TRP	32	-12.895
8.057	0.929	1.00	0.00	BrD ATOM	525	HE1	TRP	32	-12.970
8.574	1.758	1.00	0.00	BrD ATOM	526	CE2	TRP	32	-13.253
6.743	0.770	1.00	0.00	BrD ATOM	527	CE3	TRP	32	-13.270
5.095	-0.991	1.00	0.00	BrD ATOM	528	HE3	TRP	32	-13.068
4.788	-2.006	1.00	0.00	BrD ATOM	529	CZ2	TRP	32	-13.784
5.839	1.681	1.00	0.00	BrD ATOM	530	HZ2	TRP	32	-13.983
6.109	2.708	1.00	0.00	BrD ATOM	531	CZ3	TRP	32	-13.786
4.196	-0.086	1.00	0.00	BrD ATOM	532	HZ3	TRP	32	-14.003
3.185	-0.396	1.00	0.00	BrD ATOM	533	CH2	TRP	32	-14.055
4.577	1.230	1.00	0.00	BrD ATOM	534	HH2	TRP	32	-14.420

REPLACEMENT SHEET

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3.838   1.903  1.00  0.00      BrD ATOM    535  C   TRP    32     -10.855  -
5.382  -2.797  1.00  0.00      BrD ATOM    536  O   TRP    32     -11.199  -
4.752  -3.797  1.00  0.00      BrD ATOM    537  N   PRO    33     -10.636  -
4.741  -1.618  1.00  0.00      BrD ATOM    538  CA  PRO    33     -10.800  -
3.297  -1.493  1.00  0.00      BrD ATOM    539  HA  PRO    33     -11.693  -
2.959  -1.999  1.00  0.00      BrD ATOM    540  CB  PRO    33     -10.947  -
3.057   0.017  1.00  0.00      BrD ATOM    541  HB1 PRO    33     -10.191  -
2.357   0.341  1.00  0.00      BrD ATOM    542  HB2 PRO    33     -11.926  -
2.646   0.219  1.00  0.00      BrD ATOM    543  CG  PRO    33     -10.771  -
4.386   0.685  1.00  0.00      BrD ATOM    544  HG1 PRO    33     -11.713  -
4.744   1.048  1.00  0.00      BrD ATOM    545  HG2 PRO    33     -10.075  -
4.288   1.505  1.00  0.00      BrD ATOM    546  CD  PRO    33     -10.223  -
5.333  -0.337  1.00  0.00      BrD ATOM    547  HD1 PRO    33     -10.632  -
6.319  -0.205  1.00  0.00      BrD ATOM    548  HD2 PRO    33      -9.165  -
5.358  -0.254  1.00  0.00      BrD ATOM    549  C   PRO    33      -9.596  -
2.535  -2.040  1.00  0.00      BrD ATOM    550  O   PRO    33      -9.687  -
1.343  -2.332  1.00  0.00      BrD ATOM    551  N   PHE    34      -8.472  -
3.233  -2.187  1.00  0.00      BrD ATOM    552  HN  PHE    34      -8.458  -
4.180  -1.936  1.00  0.00      BrD ATOM    553  CA  PHE    34      -7.256  -
2.619  -2.703  1.00  0.00      BrD ATOM    554  HA  PHE    34      -7.295  -
1.564  -2.475  1.00  0.00      BrD ATOM    555  CB  PHE    34      -6.026  -
3.228  -2.030  1.00  0.00      BrD ATOM    556  HB1 PHE    34      -5.773  -
4.150  -2.531  1.00  0.00      BrD ATOM    557  HB2 PHE    34      -5.198  -
2.540  -2.118  1.00  0.00      BrD ATOM    558  CG  PHE    34      -6.228  -
3.531  -0.573  1.00  0.00      BrD ATOM    559  CD1 PHE    34      -6.985  -
2.689   0.226  1.00  0.00      BrD ATOM    560  HD1 PHE    34      -7.430  -
1.805  -0.208  1.00  0.00      BrD ATOM    561  CD2 PHE    34      -5.663  -
4.659  -0.003  1.00  0.00      BrD ATOM    562  HD2 PHE    34      -5.074  -
5.324  -0.617  1.00  0.00      BrD ATOM    563  CE1 PHE    34      -7.175  -
2.968   1.566  1.00  0.00      BrD ATOM    564  HE1 PHE    34      -7.767  -
2.303   2.179  1.00  0.00      BrD ATOM    565  CE2 PHE    34      -5.852  -
4.944   1.335  1.00  0.00      BrD ATOM    566  HE2 PHE    34      -5.409  -
5.829   1.765  1.00  0.00      BrD ATOM    567  CZ  PHE    34      -6.607  -
4.098   2.122  1.00  0.00      BrD ATOM    568  HZ  PHE    34      -6.753  -
4.319   3.168  1.00  0.00      BrD ATOM    569  C   PHE    34      -7.150  -
2.790  -4.213  1.00  0.00      BrD ATOM    570  O   PHE    34      -6.653  -
1.909  -4.907  1.00  0.00      BrD ATOM    571  N   MET    35      -7.624  -
3.923  -4.721  1.00  0.00      BrD ATOM    572  HN  MET    35      -8.000  -
4.598  -4.119  1.00  0.00      BrD ATOM    573  CA  MET    35      -7.545  -
4.205  -6.151  1.00  0.00      BrD ATOM    574  HA  MET    35      -6.600  -
3.825  -6.507  1.00  0.00      BrD ATOM    575  CB  MET    35      -7.593  -
5.706  -6.393  1.00  0.00      BrD ATOM    576  HB1 MET    35      -7.670  -
5.889  -7.454  1.00  0.00      BrD ATOM    577  HB2 MET    35      -8.463  -
6.114  -5.899  1.00  0.00      BrD ATOM    578  CG  MET    35      -6.367  -
6.423  -5.871  1.00  0.00      BrD ATOM    579  HG1 MET    35      -6.673  -
7.114  -5.107  1.00  0.00      BrD ATOM    580  HG2 MET    35      -5.696  -
5.692  -5.444  1.00  0.00      BrD ATOM    581  SD  MET    35      -5.490  -
7.322  -7.161  1.00  0.00      BrD ATOM    582  CE  MET    35      -4.032  -
6.298  -7.337  1.00  0.00      BrD ATOM    583  HE1 MET    35      -3.284  -
6.831  -7.905  1.00  0.00      BrD ATOM    584  HE2 MET    35      -3.639  -
6.062  -6.358  1.00  0.00      BrD ATOM    585  HE3 MET    35      -4.294  -
5.384  -7.850  1.00  0.00      BrD ATOM    586  C   MET    35      -8.661  -
3.519  -6.924  1.00  0.00      BrD ATOM    587  O   MET    35      -9.396  -
4.160  -7.675  1.00  0.00      BrD ATOM    588  N   GLU    36      -8.749  -
2.208  -6.762  1.00  0.00      BrD ATOM    589  HN  GLU    36      -8.116  -
1.765  -6.164  1.00  0.00      BrD ATOM    590  CA  GLU    36      -9.751  -
1.407  -7.457  1.00  0.00      BrD ATOM    591  HA  GLU    36      -9.531  -
1.453  -8.515  1.00  0.00      BrD ATOM    592  CB  GLU    36     -11.156  -
1.964  -7.207  1.00  0.00      BrD ATOM    593  HB1 GLU    36     -11.084  -
3.018  -6.987  1.00  0.00      BrD ATOM    594  HB2 GLU    36     -11.581  -
1.458  -6.354  1.00  0.00      BrD ATOM    595  CG  GLU    36     -12.099  -
1.787  -8.385  1.00  0.00      BrD ATOM    596  HG1 GLU    36     -11.527  -
1.466  -9.243  1.00  0.00      BrD ATOM    597  HG2 GLU    36     -12.569  -
2.735  -8.600  1.00  0.00      BrD ATOM    598  CD  GLU    36     -13.182  -
0.761  -8.114  1.00  0.00      BrD ATOM    599  OE1 GLU    36     -12.865  -
0.447  -8.098  1.00  0.00      BrD ATOM    600  OE2 GLU    36     -14.348  -
1.165  -7.919  1.00  0.00      BrD ATOM    601  C   GLU    36      -9.692
0.050  -7.001  1.00  0.00      BrD ATOM    602  O   GLU    36     -10.470
0.471  -6.145  1.00  0.00      BrD ATOM    603  N   PRO    37      -8.764
0.842  -7.565  1.00  0.00      BrD ATOM    604  CA  PRO    37      -8.604
2.255  -7.202  1.00  0.00      BrD ATOM    605  HA  PRO    37      -8.407
2.369  -6.146  1.00  0.00      BrD ATOM    606  CB  PRO    37      -7.376
2.709  -8.004  1.00  0.00      BrD ATOM    607  HB1 PRO    37      -7.696
3.306  -8.846  1.00  0.00      BrD ATOM    608  HB2 PRO    37      -6.728
3.295  -7.370  1.00  0.00      BrD ATOM    609  CG  PRO    37      -6.706
1.453  -8.451  1.00  0.00      BrD ATOM    610  HG1 PRO    37      -6.222
1.614  -9.403  1.00  0.00      BrD ATOM    611  HG2 PRO    37      -5.984
1.139  -7.711  1.00  0.00      BrD ATOM    612  CD  PRO    37      -7.793
0.426  -8.587  1.00  0.00      BrD ATOM    613  HD1 PRO    37      -8.229
0.465  -9.574  1.00  0.00      BrD ATOM    614  HD2 PRO    37      -7.410  -
0.561  -8.378  1.00  0.00      BrD ATOM    615  C   PRO    37      -9.822
3.093  -7.576  1.00  0.00      BrD ATOM    616  O   PRO    37     -10.678
2.655  -8.344  1.00  0.00      BrD ATOM    617  N   VAL    38      -9.892
4.301  -7.025  1.00  0.00      BrD ATOM    618  HN  VAL    38      -9.179
4.594  -6.422  1.00  0.00      BrD ATOM    619  CA  VAL    38     -11.006
5.206  -7.300  1.00  0.00      BrD ATOM    620  HA  VAL    38     -11.709
4.683  -7.931  1.00  0.00      BrD ATOM    621  CB  VAL    38     -11.750
5.646  -6.012  1.00  0.00      BrD ATOM    622  HB  VAL    38     -11.449
6.657  -5.781  1.00  0.00      BrD ATOM    623  CG1 VAL    38     -11.395
4.767  -4.819  1.00  0.00      BrD ATOM    624 HG11 VAL    38     -11.888
5.145  -3.935  1.00  0.00      BrD ATOM    625 HG12 VAL    38     -10.326
4.779  -4.667  1.00  0.00      BrD ATOM    626 HG13 VAL    38     -11.721
3.755  -5.008  1.00  0.00      BrD ATOM    627  CG2 VAL    38     -13.253
5.646  -6.246  1.00  0.00      BrD ATOM    628 HG21 VAL    38     -13.760

5.374  -5.333  1.00  0.00      BrD ATOM    629 HG22 VAL    38     -13.497
4.934  -7.020  1.00  0.00      BrD ATOM    630 HG23 VAL    38     -13.570
6.629  -6.553  1.00  0.00      BrD ATOM    631  C   VAL    38     -10.518
6.451  -8.035  1.00  0.00      BrD ATOM    632  O   VAL    38      -9.410
6.473  -8.571  1.00  0.00      BrD ATOM    633  N   LYS    39     -11.349
7.488  -8.051  1.00  0.00      BrD ATOM    634  HN  LYS    39     -12.215
7.412  -7.609  1.00  0.00      BrD ATOM    635  CA  LYS    39     -11.005
8.737  -8.715  1.00  0.00      BrD ATOM    636  HA  LYS    39      -9.947
8.906  -8.574  1.00  0.00      BrD ATOM    637  CB  LYS    39     -11.299
8.646 -10.216  1.00  0.00      BrD ATOM    638  HB1 LYS    39     -10.419
8.285 -10.714  1.00  0.00      BrD ATOM    639  HB2 LYS    39     -11.531
9.633 -10.587  1.00  0.00      BrD ATOM    640  CG  LYS    39     -12.452
7.722 -10.569  1.00  0.00      BrD ATOM    641  HG1 LYS    39     -12.970
7.450  -9.664  1.00  0.00      BrD ATOM    642  HG2 LYS    39     -13.127
8.241 -11.232  1.00  0.00      BrD ATOM    643  CD  LYS    39     -11.962
6.458 -11.256  1.00  0.00      BrD ATOM    644  HD1 LYS    39     -12.413
5.601 -10.777  1.00  0.00      BrD ATOM    645  HD2 LYS    39     -10.888
6.402 -11.160  1.00  0.00      BrD ATOM    646  CE  LYS    39     -12.326
6.447 -12.732  1.00  0.00      BrD ATOM    647  HE1 LYS    39     -11.779
5.653 -13.219  1.00  0.00      BrD ATOM    648  HE2 LYS    39     -12.044
7.395 -13.166  1.00  0.00      BrD ATOM    649  NZ  LYS    39     -13.784
6.232 -12.945  1.00  0.00      BrD ATOM    650  HZ1 LYS    39     -13.963
5.950 -13.930  1.00  0.00      BrD ATOM    651  HZ2 LYS    39     -14.307
7.108 -12.745  1.00  0.00      BrD ATOM    652  HZ3 LYS    39     -14.130
5.482 -12.313  1.00  0.00      BrD ATOM    653  C   LYS    39     -11.772
9.903  -8.105  1.00  0.00      BrD ATOM    654  O   LYS    39     -12.487
9.739  -7.116  1.00  0.00      BrD ATOM    655  N   ARG    40     -11.626
11.078  -8.706  1.00  0.00      BrD ATOM    656  HN  ARG    40     -11.040
11.146  -9.488  1.00  0.00      BrD ATOM    657  CA  ARG    40     -12.304
12.273  -8.223  1.00  0.00      BrD ATOM    658  HA  ARG    40     -12.018
12.419  -7.191  1.00  0.00      BrD ATOM    659  CB  ARG    40     -11.866
13.492  -9.037  1.00  0.00      BrD ATOM    660  HB1 ARG    40     -12.313
13.435 -10.019  1.00  0.00      BrD ATOM    661  HB2 ARG    40     -10.792
13.476  -9.139  1.00  0.00      BrD ATOM    662  CG  ARG    40     -12.265
14.819  -8.410  1.00  0.00      BrD ATOM    663  HG1 ARG    40     -12.664
14.634  -7.424  1.00  0.00      BrD ATOM    664  HG2 ARG    40     -13.020
15.285  -9.025  1.00  0.00      BrD ATOM    665  CD  ARG    40     -11.075
15.759  -8.292  1.00  0.00      BrD ATOM    666  HD1 ARG    40     -10.715
15.988  -9.284  1.00  0.00      BrD ATOM    667  HD2 ARG    40     -10.296
15.263  -7.732  1.00  0.00      BrD ATOM    668  NE  ARG    40     -11.426
17.004  -7.616  1.00  0.00      BrD ATOM    669  HE  ARG    40     -11.554
17.802  -8.171  1.00  0.00      BrD ATOM    670  CZ  ARG    40     -11.577
17.109  -6.300  1.00  0.00      BrD ATOM    671 NH1 ARG    40     -11.409
16.047  -5.525  1.00  0.00      BrD ATOM    672 HH11 ARG    40     -11.168
15.165  -5.930  1.00  0.00      BrD ATOM    673 HH12 ARG    40     -11.523
16.127  -4.535  1.00  0.00      BrD ATOM    674 NH2 ARG    40     -11.897
18.276  -5.758  1.00  0.00      BrD ATOM    675 HH21 ARG    40     -12.011
18.353  -4.767  1.00  0.00      BrD ATOM    676 HH22 ARG    40     -12.025
19.079  -6.339  1.00  0.00      BrD ATOM    677  C   ARG    40     -13.824
12.123  -8.293  1.00  0.00      BrD ATOM    678  O   ARG    40     -14.556
12.915  -7.700  1.00  0.00      BrD ATOM    679  N   THR    41     -14.301
11.109  -9.017  1.00  0.00      BrD ATOM    680  HN  THR    41     -13.680
10.511  -9.481  1.00  0.00      BrD ATOM    681  CA  THR    41     -15.737
10.898  -9.159  1.00  0.00      BrD ATOM    682  HA  THR    41     -16.228
11.725  -8.681  1.00  0.00      BrD ATOM    683  CB  THR    41     -16.133
10.870 -10.637  1.00  0.00      BrD ATOM    684  HB  THR    41     -15.862
11.812 -11.090  1.00  0.00      BrD ATOM    685  OG1 THR    41     -17.533
10.696 -10.775  1.00  0.00      BrD ATOM    686  HG1 THR    41     -17.988
11.239 -10.127  1.00  0.00      BrD ATOM    687  CG2 THR    41     -15.453
9.771 -11.421  1.00  0.00      BrD ATOM    688 HG21 THR    41     -14.433
9.669 -11.083  1.00  0.00      BrD ATOM    689 HG22 THR    41     -15.462
10.020 -12.472  1.00  0.00      BrD ATOM    690 HG23 THR    41     -15.979
8.841 -11.267  1.00  0.00      BrD ATOM    691  C   THR    41     -16.197
9.623  -8.467  1.00  0.00      BrD ATOM    692  O   THR    41     -17.123
9.656  -7.658  1.00  0.00      BrD ATOM    693  N   GLU    42     -15.573
8.498  -8.792  1.00  0.00      BrD ATOM    694  HN  GLU    42     -14.835
8.521  -9.435  1.00  0.00      BrD ATOM    695  CA  GLU    42     -15.940
7.236  -8.163  1.00  0.00      BrD ATOM    696  HA  GLU    42     -16.954
7.002  -8.454  1.00  0.00      BrD ATOM    697  CB  GLU    42     -15.013
6.109  -8.623  1.00  0.00      BrD ATOM    698  HB1 GLU    42     -15.239
5.220  -8.053  1.00  0.00      BrD ATOM    699  HB2 GLU    42     -13.993
6.398  -8.431  1.00  0.00      BrD ATOM    700  CG  GLU    42     -15.142
5.774 -10.098  1.00  0.00      BrD ATOM    701  HG1 GLU    42     -14.284
5.191 -10.396  1.00  0.00      BrD ATOM    702  HG2 GLU    42     -15.166
6.694 -10.663  1.00  0.00      BrD ATOM    703  CD  GLU    42     -16.397
4.982 -10.409  1.00  0.00      BrD ATOM    704  OE1 GLU    42     -17.489
5.589 -10.443  1.00  0.00      BrD ATOM    705  OE2 GLU    42     -16.289
3.756 -10.620  1.00  0.00      BrD ATOM    706  C   GLU    42     -15.881
7.374  -6.647  1.00  0.00      BrD ATOM    707  O   GLU    42     -16.614
6.703  -5.920  1.00  0.00      BrD ATOM    708  N   ALA    43     -15.024
8.279  -6.181  1.00  0.00      BrD ATOM    709  HN  ALA    43     -14.457
8.774  -6.817  1.00  0.00      BrD ATOM    710  CA  ALA    43     -14.861
8.509  -4.752  1.00  0.00      BrD ATOM    711  HA  ALA    43     -15.712
8.080  -4.245  1.00  0.00      BrD ATOM    712  CB  ALA    43     -13.609
7.810  -4.245  1.00  0.00      BrD ATOM    713  HB1 ALA    43     -12.893
7.731  -5.049  1.00  0.00      BrD ATOM    714  HB2 ALA    43     -13.866
6.822  -3.893  1.00  0.00      BrD ATOM    715  HB3 ALA    43     -13.180
8.381  -3.435  1.00  0.00      BrD ATOM    716  C   ALA    43     -14.799
10.002  -4.440  1.00  0.00      BrD ATOM    717  O   ALA    43     -13.721
10.555  -4.222  1.00  0.00      BrD ATOM    718  N   PRO    44     -15.962
10.676  -4.414  1.00  0.00      BrD ATOM    719  CA  PRO    44     -16.038
12.114  -4.129  1.00  0.00      BrD ATOM    720  HA  PRO    44     -15.511
12.692  -4.874  1.00  0.00      BrD ATOM    721  CB  PRO    44     -17.539
12.422  -4.207  1.00  0.00      BrD ATOM    722  HB1 PRO    44     -17.688

13.369  -4.704  1.00  0.00      BrD ATOM    723  HB2 PRO    44     -17.951
12.465  -3.210  1.00  0.00      BrD ATOM    724  CG  PRO    44     -18.125
11.298  -4.991  1.00  0.00      BrD ATOM    725  HG1 PRO    44     -18.071
11.518  -6.047  1.00  0.00      BrD ATOM    726  HG2 PRO    44     -19.150
11.137  -4.692  1.00  0.00      BrD ATOM    727  CD  PRO    44     -17.291
10.095  -4.665  1.00  0.00      BrD ATOM    728  HD1 PRO    44     -17.264
9.413  -5.500  1.00  0.00      BrD ATOM    729  HD2 PRO    44     -17.668
9.601  -3.783  1.00  0.00      BrD ATOM    730  C   PRO    44     -15.498
12.458  -2.746  1.00  0.00      BrD ATOM    731  O   PRO    44     -16.262
12.635  -1.797  1.00  0.00      BrD ATOM    732  N   GLY    45     -14.177
12.551  -2.637  1.00  0.00      BrD ATOM    733  HN  GLY    45     -13.617
12.400  -3.427  1.00  0.00      BrD ATOM    734  CA  GLY    45     -13.560
12.875  -1.365  1.00  0.00      BrD ATOM    735  HA1 GLY    45     -13.586
13.946  -1.228  1.00  0.00      BrD ATOM    736  HA2 GLY    45     -14.128
12.409  -0.573  1.00  0.00      BrD ATOM    737  C   GLY    45     -12.121
12.405  -1.278  1.00  0.00      BrD ATOM    738  O   GLY    45     -11.333
12.942  -0.499  1.00  0.00      BrD ATOM    739  N   TYR    46     -11.777
11.403  -2.081  1.00  0.00      BrD ATOM    740  HN  TYR    46     -12.450
11.015  -2.678  1.00  0.00      BrD ATOM    741  CA  TYR    46     -10.423
10.861  -2.089  1.00  0.00      BrD ATOM    742  HA  TYR    46     -10.271
10.337  -1.158  1.00  0.00      BrD ATOM    743  CB  TYR    46     -10.255
9.878  -3.249  1.00  0.00      BrD ATOM    744  HB1 TYR    46     -11.073
10.006  -3.942  1.00  0.00      BrD ATOM    745  HB2 TYR    46      -9.324
10.084  -3.755  1.00  0.00      BrD ATOM    746  CG  TYR    46     -10.237
8.431  -2.814  1.00  0.00      BrD ATOM    747  CD1 TYR    46      -9.262
7.558  -3.279  1.00  0.00      BrD ATOM    748  HD1 TYR    46      -8.511
7.926  -3.962  1.00  0.00      BrD ATOM    749  CD2 TYR    46     -11.194
7.938  -1.935  1.00  0.00      BrD ATOM    750  HD2 TYR    46     -11.958
8.605  -1.564  1.00  0.00      BrD ATOM    751  CE1 TYR    46      -9.242
6.235  -2.884  1.00  0.00      BrD ATOM    752  HE1 TYR    46      -8.474
5.572  -3.254  1.00  0.00      BrD ATOM    753  CE2 TYR    46     -11.180
6.617  -1.534  1.00  0.00      BrD ATOM    754  HE2 TYR    46     -11.933
6.253  -0.850  1.00  0.00      BrD ATOM    755  CZ  TYR    46     -10.203
5.769  -2.010  1.00  0.00      BrD ATOM    756  OH  TYR    46     -10.186
4.452  -1.612  1.00  0.00      BrD ATOM    757  HH  TYR    46      -9.895
4.397  -0.699  1.00  0.00      BrD ATOM    758  C   TYR    46      -9.386
11.975  -2.200  1.00  0.00      BrD ATOM    759  O   TYR    46      -9.727
13.132  -2.446  1.00  0.00      BrD ATOM    760  N   TYR    47      -8.120
11.618  -2.014  1.00  0.00      BrD ATOM    761  HN  TYR    47      -7.911
10.680  -1.823  1.00  0.00      BrD ATOM    762  CA  TYR    47      -7.033
12.587  -2.097  1.00  0.00      BrD ATOM    763  HA  TYR    47      -6.102
12.042  -2.050  1.00  0.00      BrD ATOM    764  CB  TYR    47      -7.099
13.345  -3.424  1.00  0.00      BrD ATOM    765  HB1 TYR    47      -7.889
14.080  -3.370  1.00  0.00      BrD ATOM    766  HB2 TYR    47      -6.158
13.848  -3.590  1.00  0.00      BrD ATOM    767  CG  TYR    47      -7.370
12.459  -4.619  1.00  0.00      BrD ATOM    768  CD1 TYR    47      -8.056
12.946  -5.725  1.00  0.00      BrD ATOM    769  HD1 TYR    47      -8.397
13.971  -5.722  1.00  0.00      BrD ATOM    770  CD2 TYR    47      -6.940
11.137  -4.644  1.00  0.00      BrD ATOM    771  HD2 TYR    47      -6.405
10.742  -3.792  1.00  0.00      BrD ATOM    772  CE1 TYR    47      -8.306
12.143  -6.821  1.00  0.00      BrD ATOM    773  HE1 TYR    47      -8.841
12.540  -7.671  1.00  0.00      BrD ATOM    774  CE2 TYR    47      -7.186
10.328  -5.738  1.00  0.00      BrD ATOM    775  HE2 TYR    47      -6.845
9.303  -5.739  1.00  0.00      BrD ATOM    776  CZ  TYR    47      -7.870
10.835  -6.823  1.00  0.00      BrD ATOM    777  OH  TYR    47      -8.117
10.032  -7.912  1.00  0.00      BrD ATOM    778  HH  TYR    47      -7.572
10.317  -8.650  1.00  0.00      BrD ATOM    779  C   TYR    47      -7.085
13.572  -0.933  1.00  0.00      BrD ATOM    780  O   TYR    47      -6.183
13.605  -0.095  1.00  0.00      BrD ATOM    781  N   GLU    48      -8.144
14.376  -0.887  1.00  0.00      BrD ATOM    782  HN  GLU    48      -8.830
14.304  -1.584  1.00  0.00      BrD ATOM    783  CA  GLU    48      -8.309
15.365   0.174  1.00  0.00      BrD ATOM    784  HA  GLU    48      -7.569
16.138   0.024  1.00  0.00      BrD ATOM    785  CB  GLU    48      -9.704
15.991   0.104  1.00  0.00      BrD ATOM    786  HB1 GLU    48      -9.746
16.827   0.786  1.00  0.00      BrD ATOM    787  HB2 GLU    48     -10.432
15.254   0.408  1.00  0.00      BrD ATOM    788  CG  GLU    48     -10.079
16.488  -1.283  1.00  0.00      BrD ATOM    789  HG1 GLU    48      -9.268
17.086  -1.669  1.00  0.00      BrD ATOM    790  HG2 GLU    48     -10.235
15.635  -1.927  1.00  0.00      BrD ATOM    791  CD  GLU    48     -11.341
17.328  -1.282  1.00  0.00      BrD ATOM    792  OE1 GLU    48     -12.059
17.320  -0.260  1.00  0.00      BrD ATOM    793  OE2 GLU    48     -11.612
17.994  -2.304  1.00  0.00      BrD ATOM    794  C   GLU    48      -8.091
14.736   1.547  1.00  0.00      BrD ATOM    795  O   GLU    48      -7.683
15.410   2.493  1.00  0.00      BrD ATOM    796  N   VAL    49      -8.360
13.439   1.645  1.00  0.00      BrD ATOM    797  HN  VAL    49      -8.682
12.958   0.854  1.00  0.00      BrD ATOM    798  CA  VAL    49      -8.192
12.712   2.899  1.00  0.00      BrD ATOM    799  HA  VAL    49      -7.919
13.423   3.665  1.00  0.00      BrD ATOM    800  CB  VAL    49      -9.495
12.010   3.332  1.00  0.00      BrD ATOM    801  HB  VAL    49      -9.555
11.064   2.815  1.00  0.00      BrD ATOM    802  CG1 VAL    49     -10.713
12.834   2.949  1.00  0.00      BrD ATOM    803 HG11 VAL    49     -11.006
12.591   1.937  1.00  0.00      BrD ATOM    804 HG12 VAL    49     -10.472
13.884   3.011  1.00  0.00      BrD ATOM    805 HG13 VAL    49     -11.526
12.609   3.622  1.00  0.00      BrD ATOM    806  CG2 VAL    49      -9.475
11.729   4.827  1.00  0.00      BrD ATOM    807 HG21 VAL    49      -9.393
12.661   5.367  1.00  0.00      BrD ATOM    808 HG22 VAL    49      -8.628
11.101   5.062  1.00  0.00      BrD ATOM    809 HG23 VAL    49     -10.387
11.226   5.111  1.00  0.00      BrD ATOM    810  C   VAL    49      -7.100
11.656   2.787  1.00  0.00      BrD ATOM    811  O   VAL    49      -6.592
11.167   3.797  1.00  0.00      BrD ATOM    812  N   ILE    50      -6.763
11.281   1.558  1.00  0.00      BrD ATOM    813  HN  ILE    50      -7.214
11.686   0.792  1.00  0.00      BrD ATOM    814  CA  ILE    50      -5.769
10.245   1.324  1.00  0.00      BrD ATOM    815  HA  ILE    50      -5.542
9.783   2.274  1.00  0.00      BrD ATOM    816  CB  ILE    50      -6.291
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REPLACEMENT SHEET

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 9.152   0.366  1.00  0.00      BrD ATOM    817  HB  ILE    50      -6.001
 9.428  -0.635  1.00  0.00      BrD ATOM    818  CG1 ILE    50      -7.818
 9.035   0.436  1.00  0.00      BrD ATOM    819 HG11 ILE    50      -8.256
10.011   0.288  1.00  0.00      BrD ATOM    820 HG12 ILE    50      -8.158
 8.371  -0.344  1.00  0.00      BrD ATOM    821  CG2 ILE    50      -5.644
 7.815   0.684  1.00  0.00      BrD ATOM    822 HG21 ILE    50      -5.490
 7.264  -0.233  1.00  0.00      BrD ATOM    823 HG22 ILE    50      -6.289
 7.250   1.339  1.00  0.00      BrD ATOM    824 HG23 ILE    50      -4.694
 7.981   1.169  1.00  0.00      BrD ATOM    825  CD1 ILE    50      -8.324
 8.499   1.757  1.00  0.00      BrD ATOM    826 HD11 ILE    50      -8.330
 9.293   2.489  1.00  0.00      BrD ATOM    827 HD12 ILE    50      -7.674
 7.704   2.094  1.00  0.00      BrD ATOM    828 HD13 ILE    50      -9.326
 8.116   1.631  1.00  0.00      BrD ATOM    829  C   ILE    50      -4.490
10.827   0.738  1.00  0.00       BrD ATOM    830  O   ILE    50      -4.504
11.444  -0.327  1.00  0.00      BrD ATOM    831  N   ARG    51      -3.384
10.597   1.428  1.00  0.00      BrD ATOM    832  HN  ARG    51      -3.443
10.086   2.260  1.00  0.00      BrD ATOM    833  CA  ARG    51      -2.082
11.061   0.969  1.00  0.00      BrD ATOM    834  HA  ARG    51      -2.068
12.139   1.024  1.00  0.00      BrD ATOM    835  CB  ARG    51      -0.988
10.491   1.870  1.00  0.00      BrD ATOM    836  HB1 ARG    51      -1.452
10.081   2.754  1.00  0.00      BrD ATOM    837  HB2 ARG    51      -0.478
 9.698   1.341  1.00  0.00       BrD ATOM    838  CG  ARG    51       0.048
11.516   2.301  1.00  0.00      BrD ATOM    839  HG1 ARG    51      -0.399
12.185   3.022  1.00  0.00      BrD ATOM    840  HG2 ARG    51       0.883
11.000   2.753  1.00  0.00      BrD ATOM    841  CD  ARG    51       0.552
12.329   1.120  1.00  0.00      BrD ATOM    842  HD1 ARG    51       0.514
11.713   0.233  1.00  0.00      BrD ATOM    843  HD2 ARG    51      -0.090
13.187   0.989  1.00  0.00      BrD ATOM    844  NE  ARG    51       1.923
12.789   1.318  1.00  0.00      BrD ATOM    845  HE  ARG    51       2.296
12.730   2.222  1.00  0.00      BrD ATOM    846  CZ  ARG    51       2.683
13.279   0.344  1.00  0.00      BrD ATOM    847  NH1 ARG    51       3.921
13.678   0.602  1.00  0.00      BrD ATOM    848 HH11 ARG    51       4.491
14.046  -0.132  1.00  0.00      BrD ATOM    849 HH12 ARG    51       4.284
13.610   1.532  1.00  0.00      BrD ATOM    850  NH2 ARG    51       2.206
13.371  -0.890  1.00  0.00      BrD ATOM    851 HH21 ARG    51       2.779
13.739  -1.622  1.00  0.00      BrD ATOM    852 HH22 ARG    51       1.273
13.071  -1.089  1.00  0.00      BrD ATOM    853  C   ARG    51      -1.836
10.631  -0.471  1.00  0.00      BrD ATOM    854  O   ARG    51      -1.644
11.461  -1.360  1.00  0.00      BrD ATOM    855  N   SER    52      -1.843
 9.322  -0.687  1.00  0.00      BrD ATOM    856  HN  SER    52      -2.010
 8.718   0.067  1.00  0.00      BrD ATOM    857  CA  SER    52      -1.634
 8.753  -2.012  1.00  0.00      BrD ATOM    858  HA  SER    52      -1.991
 9.462  -2.740  1.00  0.00      BrD ATOM    859  CB  SER    52      -0.145
 8.497  -2.253  1.00  0.00      BrD ATOM    860  HB1 SER    52       0.426
 8.900  -1.430  1.00  0.00      BrD ATOM    861  HB2 SER    52       0.028
 7.433  -2.325  1.00  0.00      BrD ATOM    862  OG  SER    52       0.290
 9.112  -3.453  1.00  0.00      BrD ATOM    863  HG  SER    52      -0.218
 8.768  -4.192  1.00  0.00      BrD ATOM    864  C   SER    52      -2.415
 7.450  -2.148  1.00  0.00      BrD ATOM    865  O   SER    52      -1.912
 6.382  -1.801  1.00  0.00      BrD ATOM    866  N   PRO    53      -3.675
 7.518  -2.619  1.00  0.00      BrD ATOM    867  CA  PRO    53      -4.531
 6.344  -2.745  1.00  0.00      BrD ATOM    868  HA  PRO    53      -4.993
 6.101  -1.800  1.00  0.00      BrD ATOM    869  CB  PRO    53      -5.620
 6.776  -3.738  1.00  0.00      BrD ATOM    870  HB1 PRO    53      -5.555
 6.173  -4.630  1.00  0.00      BrD ATOM    871  HB2 PRO    53      -6.590
 6.638  -3.284  1.00  0.00      BrD ATOM    872  CG  PRO    53      -5.371
 8.224  -4.043  1.00  0.00      BrD ATOM    873  HG1 PRO    53      -6.296
 8.775  -3.959  1.00  0.00      BrD ATOM    874  HG2 PRO    53      -4.969
 8.321  -5.041  1.00  0.00      BrD ATOM    875  CD  PRO    53      -4.377
 8.735  -3.034  1.00  0.00      BrD ATOM    876  HD1 PRO    53      -4.886
 9.191  -2.200  1.00  0.00      BrD ATOM    877  HD2 PRO    53      -3.704
 9.437  -3.498  1.00  0.00      BrD ATOM    878  C   PRO    53      -3.770
 5.120  -3.252  1.00  0.00      BrD ATOM    879  O   PRO    53      -3.456
 4.218  -2.475  1.00  0.00      BrD ATOM    880  N   MET    54      -3.471
 5.089  -4.553  1.00  0.00      BrD ATOM    881  HN  MET    54      -3.738
 5.838  -5.124  1.00  0.00      BrD ATOM    882  CA  MET    54      -2.734
 3.970  -5.149  1.00  0.00      BrD ATOM    883  HA  MET    54      -2.905
 3.995  -6.215  1.00  0.00      BrD ATOM    884  CB  MET    54      -1.236
 4.127  -4.877  1.00  0.00      BrD ATOM    885  HB1 MET    54      -0.936
 5.129  -5.145  1.00  0.00      BrD ATOM    886  HB2 MET    54      -1.057
 3.978  -3.822  1.00  0.00      BrD ATOM    887  CG  MET    54      -0.368
 3.147  -5.649  1.00  0.00      BrD ATOM    888  HG1 MET    54      -0.510
 2.160  -5.235  1.00  0.00      BrD ATOM    889  HG2 MET    54       0.666
 3.438  -5.537  1.00  0.00      BrD ATOM    890  SD  MET    54      -0.767
 3.101  -7.407  1.00  0.00      BrD ATOM    891  CE  MET    54      -2.176
 1.995  -7.401  1.00  0.00      BrD ATOM    892  HE1 MET    54      -2.086
 1.294  -8.214  1.00  0.00      BrD ATOM    893  HE2 MET    54      -3.085
 2.567  -7.518  1.00  0.00      BrD ATOM    894  HE3 MET    54      -2.208
 1.457  -6.465  1.00  0.00      BrD ATOM    895  C   MET    54      -3.229
 2.630  -4.602  1.00  0.00      BrD ATOM    896  O   MET    54      -2.556
 1.990  -3.795  1.00  0.00      BrD ATOM    897  N   ASP    55      -4.422
 2.232  -5.029  1.00  0.00      BrD ATOM    898  HN  ASP    55      -4.919
 2.803  -5.652  1.00  0.00      BrD ATOM    899  CA  ASP    55      -5.045
 1.005  -4.544  1.00  0.00      BrD ATOM    900  HA  ASP    55      -5.234
 1.142  -3.490  1.00  0.00      BrD ATOM    901  CB  ASP    55      -6.391
 0.793  -5.249  1.00  0.00      BrD ATOM    902  HB1 ASP    55      -6.327 -
 0.045  -5.917  1.00  0.00      BrD ATOM    903  HB2 ASP    55      -6.631
 1.679  -5.817  1.00  0.00      BrD ATOM    904  CG  ASP    55      -7.520
 0.536  -4.269  1.00  0.00      BrD ATOM    905  OD1 ASP    55      -8.426 -
 0.256  -4.602  1.00  0.00      BrD ATOM    906  OD2 ASP    55      -7.496
 1.126  -3.169  1.00  0.00      BrD ATOM    907  C   ASP    55      -4.121 -
 0.212  -4.704  1.00  0.00      BrD ATOM    908  O   ASP    55      -3.406 -
 0.570  -3.772  1.00  0.00      BrD ATOM    909  N   LEU    56      -4.142 -
 0.856  -5.870  1.00  0.00      BrD ATOM    910  HN  LEU    56      -4.715 -
 0.533  -6.586  1.00  0.00      BrD ATOM    911  CA  LEU    56      -3.306 -
 2.030  -6.111  1.00  0.00      BrD ATOM    912  HA  LEU    56      -2.301 -
 1.790  -5.810  1.00  0.00      BrD ATOM    913  CB  LEU    56      -3.804 -
 3.224  -5.292  1.00  0.00      BrD ATOM    914  HB1 LEU    56      -3.692 -
 4.115  -5.892  1.00  0.00      BrD ATOM    915  HB2 LEU    56      -4.852 -
 3.082  -5.089  1.00  0.00      BrD ATOM    916  CG  LEU    56      -3.088 -
 3.451  -3.962  1.00  0.00      BrD ATOM    917  HG  LEU    56      -3.356 -
 2.661  -3.279  1.00  0.00      BrD ATOM    918  CD1 LEU    56      -3.521 -
 4.770  -3.344  1.00  0.00      BrD ATOM    919 HD11 LEU    56      -2.809 -
 5.539  -3.606  1.00  0.00      BrD ATOM    920 HD12 LEU    56      -4.497 -
 5.040  -3.719  1.00  0.00      BrD ATOM    921 HD13 LEU    56      -3.562 -
 4.668  -2.270  1.00  0.00      BrD ATOM    922  CD2 LEU    56      -1.580 -
 3.419  -4.153  1.00  0.00      BrD ATOM    923 HD21 LEU    56      -1.352 -
 3.388  -5.209  1.00  0.00      BrD ATOM    924 HD22 LEU    56      -1.144 -
 4.306  -3.716  1.00  0.00      BrD ATOM    925 HD23 LEU    56      -1.175 -
 2.542  -3.671  1.00  0.00      BrD ATOM    926  C   LEU    56      -3.305 -
 2.400  -7.587  1.00  0.00      BrD ATOM    927  O   LEU    56      -2.271 -
 2.760  -8.150  1.00  0.00      BrD ATOM    928  N   LYS    57      -4.475 -
 2.304  -8.207  1.00  0.00      BrD ATOM    929  HN  LYS    57      -5.261 -
 2.020  -7.696  1.00  0.00      BrD ATOM    930  CA  LYS    57      -4.634 -
 2.639  -9.615  1.00  0.00      BrD ATOM    931  HA  LYS    57      -4.577 -
 3.712  -9.704  1.00  0.00      BrD ATOM    932  CB  LYS    57      -6.007 -
 2.179 -10.108  1.00  0.00      BrD ATOM    933  HB1 LYS    57      -6.765 -
 2.764  -9.608  1.00  0.00      BrD ATOM    934  HB2 LYS    57      -6.139 -
 1.139  -9.850  1.00  0.00      BrD ATOM    935  CG  LYS    57      -6.203 -
 2.328 -11.608  1.00  0.00      BrD ATOM    936  HG1 LYS    57      -5.383 -
 1.845 -12.118  1.00  0.00      BrD ATOM    937  HG2 LYS    57      -7.132 -
 1.856 -11.889  1.00  0.00      BrD ATOM    938  CD  LYS    57      -6.248 -
 3.790 -12.024  1.00  0.00      BrD ATOM    939  HD1 LYS    57      -5.259 -
 4.098 -12.327  1.00  0.00      BrD ATOM    940  HD2 LYS    57      -6.571 -
 4.383 -11.181  1.00  0.00      BrD ATOM    941  CE  LYS    57      -7.210 -
 4.011 -13.180  1.00  0.00      BrD ATOM    942  HE1 LYS    57      -7.354 -
 3.073 -13.697  1.00  0.00      BrD ATOM    943  HE2 LYS    57      -6.778 -
 4.732 -13.858  1.00  0.00      BrD ATOM    944  NZ  LYS    57      -8.532 -
 4.515 -12.715  1.00  0.00      BrD ATOM    945  HZ1 LYS    57      -8.403 -
 5.182 -11.928  1.00  0.00      BrD ATOM    946  HZ2 LYS    57      -9.022 -
 5.003 -13.492  1.00  0.00      BrD ATOM    947  HZ3 LYS    57      -9.122 -
 3.723 -12.391  1.00  0.00      BrD ATOM    948  C   LYS    57      -3.533 -
 2.015 -10.473  1.00  0.00      BrD ATOM    949  O   LYS    57      -3.222 -
 2.516 -11.553  1.00  0.00      BrD ATOM    950  N   THR    58      -2.941 -
 0.923  -9.989  1.00  0.00      BrD ATOM    951  HN  THR    58      -3.240 -
 0.552  -9.135  1.00  0.00      BrD ATOM    952  CA  THR    58      -1.901 -
 0.230 -10.742  1.00  0.00      BrD ATOM    953  HA  THR    58      -1.819 -
 0.717 -11.702  1.00  0.00      BrD ATOM    954  CB  THR    58      -2.307
 1.233 -10.967  1.00  0.00      BrD ATOM    955  HB  THR    58      -2.611
 1.660 -10.024  1.00  0.00      BrD ATOM    956  OG1 THR    58      -3.403
 1.313 -11.862  1.00  0.00      BrD ATOM    957  HG1 THR    58      -3.101
 1.133 -12.755  1.00  0.00      BrD ATOM    958  CG2 THR    58      -1.197
 2.099 -11.525  1.00  0.00      BrD ATOM    959 HG21 THR    58      -0.808
 2.734 -10.743  1.00  0.00      BrD ATOM    960 HG22 THR    58      -1.585
 2.710 -12.326  1.00  0.00      BrD ATOM    961 HG23 THR    58      -0.405
 1.469 -11.904  1.00  0.00      BrD ATOM    962  C   THR    58      -0.539 -
 0.305 -10.045  1.00  0.00      BrD ATOM    963  O   THR    58       0.499 -
 0.220 -10.701  1.00  0.00      BrD ATOM    964  N   MET    59      -0.537 -
 0.445  -8.721  1.00  0.00      BrD ATOM    965  HN  MET    59      -1.388 -
 0.503  -8.238  1.00  0.00      BrD ATOM    966  CA  MET    59       0.718 -
 0.505  -7.972  1.00  0.00      BrD ATOM    967  HA  MET    59       1.401
 0.191  -8.436  1.00  0.00      BrD ATOM    968  CB  MET    59       0.499 -
 0.070  -6.513  1.00  0.00      BrD ATOM    969  HB1 MET    59       1.430
 0.316  -6.125  1.00  0.00      BrD ATOM    970  HB2 MET    59      -0.238
 0.717  -6.498  1.00  0.00      BrD ATOM    971  CG  MET    59       0.022 -
 1.176  -5.583  1.00  0.00      BrD ATOM    972  HG1 MET    59      -0.822 -
 0.811  -5.017  1.00  0.00      BrD ATOM    973  HG2 MET    59      -0.286 -
 2.022  -6.180  1.00  0.00      BrD ATOM    974  SD  MET    59       1.300 -
 1.715  -4.431  1.00  0.00      BrD ATOM    975  CE  MET    59       1.463 -
 0.259  -3.400  1.00  0.00      BrD ATOM    976 HE1 MET    59       0.629 -
 0.205  -2.715  1.00  0.00      BrD ATOM    977 HE2 MET    59       1.474
 0.624  -4.022  1.00  0.00      BrD ATOM    978 HE3 MET    59       2.386 -
 0.316  -2.841  1.00  0.00      BrD ATOM    979  C   MET    59       1.345 -
 1.901  -8.036  1.00  0.00      BrD ATOM    980  O   MET    59       2.535 -
 2.067  -7.767  1.00  0.00      BrD ATOM    981  N   SER    60       0.542 -
 2.898  -8.392  1.00  0.00      BrD ATOM    982  HN  SER    60      -0.399 -
 2.710  -8.590  1.00  0.00      BrD ATOM    983  CA  SER    60       1.025 -
 4.271  -8.478  1.00  0.00      BrD ATOM    984  HA  SER    60       1.685 -
 4.442  -7.640  1.00  0.00      BrD ATOM    985  CB  SER    60      -0.147 -
 5.250  -8.396  1.00  0.00      BrD ATOM    986  HB1 SER    60      -0.610 -
 5.171  -7.424  1.00  0.00      BrD ATOM    987  HB2 SER    60      -0.871 -
 5.006  -9.159  1.00  0.00      BrD ATOM    988  OG  SER    60       0.286 -
 6.585  -8.588  1.00  0.00      BrD ATOM    989  HG  SER    60      -0.145 -
 6.953  -9.363  1.00  0.00      BrD ATOM    990  C   SER    60       1.803 -
 4.503  -9.770  1.00  0.00      BrD ATOM    991  O   SER    60       2.636 -
 5.405  -9.850  1.00  0.00      BrD ATOM    992  N   GLU    61       1.519 -
 3.690 -10.782  1.00  0.00      BrD ATOM    993  HN  GLU    61       0.839 -
 2.995 -10.661  1.00  0.00      BrD ATOM    994  CA  GLU    61       2.182 -
 3.820 -12.075  1.00  0.00      BrD ATOM    995  HA  GLU    61       2.295 -
 4.874 -12.283  1.00  0.00      BrD ATOM    996  CB  GLU    61       1.326 -
 3.187 -13.174  1.00  0.00      BrD ATOM    997  HB1 GLU    61       1.820 -
 3.324 -14.125  1.00  0.00      BrD ATOM    998  HB2 GLU    61       1.232 -
 2.129 -12.977  1.00  0.00      BrD ATOM    999  CG  GLU    61      -0.071 -
 3.779 -13.274  1.00  0.00      BrD ATOM   1000  HG1 GLU    61      -0.494 -
 3.836 -12.282  1.00  0.00      BrD ATOM   1001  HG2 GLU    61      -0.679 -
 3.132 -13.889  1.00  0.00      BrD ATOM   1002  CD  GLU    61      -0.073 -
 5.167 -13.883  1.00  0.00      BrD ATOM   1003  OE1 GLU    61      -1.024 -
 5.488 -14.627  1.00  0.00      BrD ATOM   1004  OE2 GLU    61       0.876 -
 5.934 -13.617  1.00  0.00      BrD ATOM   1005  C   GLU    61       3.565 -
 3.174 -12.060  1.00  0.00      BrD ATOM   1006  O   GLU    61       4.466 -
 3.601 -12.782  1.00  0.00      BrD ATOM   1007  N   ARG    62       3.726 -
 2.137 -11.244  1.00  0.00      BrD ATOM   1008  HN  ARG    62       2.971 -
 1.836 -10.697  1.00  0.00      BrD ATOM   1009  CA  ARG    62       4.999 -
 1.428 -11.155  1.00  0.00      BrD ATOM   1010  HA  ARG    62       5.352 -
 1.262 -12.162  1.00  0.00      BrD ATOM   1011  CB  ARG    62       4.807 -
 0.075 -10.468  1.00  0.00      BrD ATOM   1012  HB1 ARG    62       5.753
 0.241 -10.052  1.00  0.00      BrD ATOM   1013  HB2 ARG    62       4.091 -
 0.187  -9.668  1.00  0.00      BrD ATOM   1014  CG  ARG    62       4.312
 1.018 -11.404  1.00  0.00      BrD ATOM   1015  HG1 ARG    62       4.852
 1.928 -11.195  1.00  0.00      BrD ATOM   1016  HG2 ARG    62       4.494
 0.714 -12.424  1.00  0.00      BrD ATOM   1017  CD  ARG    62       2.826
 1.278 -11.225  1.00  0.00      BrD ATOM   1018  HD1 ARG    62       2.484
 0.738 -10.356  1.00  0.00      BrD ATOM   1019  HD2 ARG    62       2.675
 2.336 -11.072  1.00  0.00      BrD ATOM   1020  NE  ARG    62       2.052
 0.851 -12.387  1.00  0.00      BrD ATOM   1021  HE  ARG    62       1.621 -
 0.028 -12.346  1.00  0.00      BrD ATOM   1022  CZ  ARG    62       1.903
 1.585 -13.485  1.00  0.00      BrD ATOM   1023  NH1 ARG    62       1.183
 1.125 -14.498  1.00  0.00      BrD ATOM   1024 HH11 ARG    62       1.072
 1.678 -15.324  1.00  0.00      BrD ATOM   1025 HH12 ARG    62       0.752
 0.226 -14.437  1.00  0.00      BrD ATOM   1026  NH2 ARG    62       2.473
 2.780 -13.571  1.00  0.00      BrD ATOM   1027 HH21 ARG    62       2.359
 3.329 -14.399  1.00  0.00      BrD ATOM   1028 HH22 ARG    62       3.018
 3.130 -12.809  1.00  0.00      BrD ATOM   1029  C   ARG    62       6.040 -
 2.255 -10.405  1.00  0.00      BrD ATOM   1030  O   ARG    62       7.101 -
 2.569 -10.945  1.00  0.00      BrD ATOM   1031  N   LEU    63       5.734 -
 2.606  -9.158  1.00  0.00      BrD ATOM   1032  HN  LEU    63       4.875 -
 2.326  -8.780  1.00  0.00      BrD ATOM   1033  CA  LEU    63       6.651 -
 3.396  -8.339  1.00  0.00      BrD ATOM   1034  HA  LEU    63       7.496 -
 2.771  -8.093  1.00  0.00      BrD ATOM   1035  CB  LEU    63       5.962 -
 3.840  -7.043  1.00  0.00      BrD ATOM   1036  HB1 LEU    63       5.009 -
 4.277  -7.302  1.00  0.00      BrD ATOM   1037  HB2 LEU    63       5.780 -
 2.962  -6.442  1.00  0.00      BrD ATOM   1038  CG  LEU    63       6.736 -
 4.857  -6.186  1.00  0.00      BrD ATOM   1039  HG  LEU    63       6.429 -
 4.754  -5.156  1.00  0.00      BrD ATOM   1040  CD1 LEU    63       8.237 -
 4.605  -6.247  1.00  0.00      BrD ATOM   1041 HD11 LEU    63       8.420 -
 3.584  -6.547  1.00  0.00      BrD ATOM   1042 HD12 LEU    63       8.685 -
 5.277  -6.965  1.00  0.00      BrD ATOM   1043 HD13 LEU    63       8.671 -
 4.779  -5.273  1.00  0.00      BrD ATOM   1044  CD2 LEU    63       6.414 -
 6.277  -6.627  1.00  0.00      BrD ATOM   1045 HD21 LEU    63       7.332 -
 6.804  -6.842  1.00  0.00      BrD ATOM   1046 HD22 LEU    63       5.798 -
 6.248  -7.514  1.00  0.00      BrD ATOM   1047 HD23 LEU    63       5.883 -
 6.787  -5.836  1.00  0.00      BrD ATOM   1048  C   LEU    63       7.150 -
 4.618  -9.103  1.00  0.00      BrD ATOM   1049  O   LEU    63       8.354 -
 4.853  -9.203  1.00  0.00      BrD ATOM   1050  N   LYS    64       6.214 -
 5.390  -9.643  1.00  0.00      BrD ATOM   1051  HN  LYS    64       5.271 -
 5.150  -9.525  1.00  0.00      BrD ATOM   1052  CA  LYS    64       6.551 -
 6.592 -10.397  1.00  0.00      BrD ATOM   1053  HA  LYS    64       6.929 -
 7.325  -9.699  1.00  0.00      BrD ATOM   1054  CB  LYS    64       5.303 -
 7.152 -11.082  1.00  0.00      BrD ATOM   1055  HB1 LYS    64       4.649 -
 6.332 -11.340  1.00  0.00      BrD ATOM   1056  HB2 LYS    64       5.602 -
 7.661 -11.987  1.00  0.00      BrD ATOM   1057  CG  LYS    64       4.523 -
 8.131 -10.221  1.00  0.00      BrD ATOM   1058  HG1 LYS    64       3.533 -
 7.734 -10.047  1.00  0.00      BrD ATOM   1059  HG2 LYS    64       5.035 -
 8.254  -9.278  1.00  0.00      BrD ATOM   1060  CD  LYS    64       4.398 -
 9.488 -10.894  1.00  0.00      BrD ATOM   1061  HD1 LYS    64       3.363 -
 9.798 -10.870  1.00  0.00      BrD ATOM   1062  HD2 LYS    64       4.726 -
 9.402 -11.920  1.00  0.00      BrD ATOM   1063  CE  LYS    64       5.243 -
10.538 -10.192  1.00  0.00      BrD ATOM   1064  HE1 LYS    64       5.904 -
10.043  -9.496  1.00  0.00      BrD ATOM   1065  HE2 LYS    64       4.589 -
11.207  -9.653  1.00  0.00      BrD ATOM   1066  NZ  LYS    64       6.060 -
11.330 -11.154  1.00  0.00      BrD ATOM   1067  HZ1 LYS    64       6.712 -
11.955 -10.638  1.00  0.00      BrD ATOM   1068  HZ2 LYS    64       6.615 -
10.693 -11.761  1.00  0.00      BrD ATOM   1069  HZ3 LYS    64       5.441 -
11.911 -11.754  1.00  0.00      BrD ATOM   1070  C   LYS    64       7.629 -
 6.305 -11.439  1.00  0.00      BrD ATOM   1071  O   LYS    64       8.376 -
 7.200 -11.834  1.00  0.00      BrD ATOM   1072  N   ASN    65       7.705 -
 5.052 -11.880  1.00  0.00      BrD ATOM   1073  HN  ASN    65       7.080 -
 4.383 -11.531  1.00  0.00      BrD ATOM   1074  CA  ASN    65       8.688 -
 4.657 -12.883  1.00  0.00      BrD ATOM   1075  HA  ASN    65       9.212 -
 5.547 -13.198  1.00  0.00      BrD ATOM   1076  CB  ASN    65       7.989 -
 4.034 -14.092  1.00  0.00      BrD ATOM   1077  HB1 ASN    65       8.680 -
 3.376 -14.600  1.00  0.00      BrD ATOM   1078  HB2 ASN    65       7.137 -
 3.463 -13.754  1.00  0.00      BrD ATOM   1079  CG  ASN    65       7.506 -
 5.076 -15.081  1.00  0.00      BrD ATOM   1080  OD1 ASN    65       8.177 -
 6.080 -15.320  1.00  0.00      BrD ATOM   1081  ND2 ASN    65       6.334 -
 4.844 -15.660  1.00  0.00      BrD ATOM   1082 HD21 ASN    65       5.854 -
 4.024 -15.421  1.00  0.00      BrD ATOM   1083 HD22 ASN    65       5.997 -
 5.502 -16.303  1.00  0.00      BrD ATOM   1084  C   ASN    65       9.703 -
 3.677 -12.308  1.00  0.00      BrD ATOM   1085  O   ASN    65      10.237 -
 2.829 -13.023  1.00  0.00      BrD ATOM   1086  N   ARG    66       9.973 -
 3.804 -11.014  1.00  0.00      BrD ATOM   1087  HN  ARG    66       9.523 -
 4.505 -10.498  1.00  0.00      BrD ATOM   1088  CA  ARG    66      10.942 -
 2.943 -10.346  1.00  0.00      BrD ATOM   1089  HA  ARG    66      10.826 -
 3.082  -9.281  1.00  0.00      BrD ATOM   1090  CB  ARG    66      12.357 -
 3.347 -10.739  1.00  0.00      BrD ATOM   1091  HB1 ARG    66      12.323 -
 3.875 -11.680  1.00  0.00      BrD ATOM   1092  HB2 ARG    66      12.959 -
 2.458 -10.854  1.00  0.00      BrD ATOM   1093  CG  ARG    66      13.018 -
 4.243  -9.713  1.00  0.00      BrD ATOM   1094  HG1 ARG    66      13.744 -
 3.666  -9.163  1.00  0.00      BrD ATOM   1095  HG2 ARG    66      12.262 -
 4.613  -9.038  1.00  0.00      BrD ATOM   1096  CD  ARG    66      13.710 -
 5.423 -10.368  1.00  0.00      BrD ATOM   1097  HD1 ARG    66      13.453 -
 5.439 -11.416  1.00  0.00      BrD ATOM   1098  HD2 ARG    66      13.358 -
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6.329	-9.898	1.00	0.00	BrD ATOM	1099	NE	ARG	66	15.162	-
5.351	-10.237	1.00	0.00	BrD ATOM	1100	HE	ARG	66	15.688	-
5.255	-11.059	1.00	0.00	BrD ATOM	1101	CZ	ARG	66	15.801	-
5.407	-9.074	1.00	0.00	BrD ATOM	1102	NH1	ARG	66	15.117	-
5.536	-7.945	1.00	0.00	BrD ATOM	1103	HH11	ARG	66	15.599	-
5.578	-7.070	1.00	0.00	BrD ATOM	1104	HH12	ARG	66	14.118	-
5.591	-7.969	1.00	0.00	BrD ATOM	1105	NH2	ARG	66	17.125	-
5.334	-9.037	1.00	0.00	BrD ATOM	1106	HH21	ARG	66	17.604	-
5.377	-8.161	1.00	0.00	BrD ATOM	1107	HH22	ARG	66	17.643	-
5.237	-9.887	1.00	0.00	BrD ATOM	1108	C	ARG	66	10.708	-
1.474	-10.682	1.00	0.00	BrD ATOM	1109	O	ARG	66	11.654	-
0.705	-10.850	1.00	0.00	BrD ATOM	1110	N	TYR	67	9.441	-
1.097	-10.783	1.00	0.00	BrD ATOM	1111	HN	TYR	67	8.736	-
1.759	-10.633	1.00	0.00	BrD ATOM	1112	CA	TYR	67	9.075	
0.280	-11.094	1.00	0.00	BrD ATOM	1113	HA	TYR	67	9.952	
0.780	-11.472	1.00	0.00	BrD ATOM	1114	CB	TYR	67	7.982	
0.309	-12.164	1.00	0.00	BrD ATOM	1115	HB1	TYR	67	7.062	-
0.061	-11.738	1.00	0.00	BrD ATOM	1116	HB2	TYR	67	8.276	-
0.330	-12.984	1.00	0.00	BrD ATOM	1117	CG	TYR	67	7.713	
1.687	-12.723	1.00	0.00	BrD ATOM	1118	CD1	TYR	67	7.042	
2.639	-11.970	1.00	0.00	BrD ATOM	1119	HD1	TYR	67	6.718	
2.385	-10.973	1.00	0.00	BrD ATOM	1120	CD2	TYR	67	8.122	
2.032	-14.005	1.00	0.00	BrD ATOM	1121	HD2	TYR	67	8.645	
1.301	-14.604	1.00	0.00	BrD ATOM	1122	CE1	TYR	67	6.787	
3.899	-12.475	1.00	0.00	BrD ATOM	1123	HE1	TYR	67	6.261	
4.625	-11.872	1.00	0.00	BrD ATOM	1124	CE2	TYR	67	7.872	
3.291	-14.518	1.00	0.00	BrD ATOM	1125	HE2	TYR	67	8.198	
3.541	-15.516	1.00	0.00	BrD ATOM	1126	CZ	TYR	67	7.204	
4.220	-13.749	1.00	0.00	BrD ATOM	1127	OH	TYR	67	6.953	
5.475	-14.256	1.00	0.00	BrD ATOM	1128	HH	TYR	67	7.446	
6.127	-13.753	1.00	0.00	BrD ATOM	1129	C	TYR	67	8.606	
1.006	-9.840	1.00	0.00	BrD ATOM	1130	O	TYR	67	8.910	
2.181	-9.639	1.00	0.00	BrD ATOM	1131	N	TYR	68	7.880	
0.291	-8.990	1.00	0.00	BrD ATOM	1132	HN	TYR	68	7.686	-
0.647	-9.197	1.00	0.00	BrD ATOM	1133	CA	TYR	68	7.401	
0.855	-7.736	1.00	0.00	BrD ATOM	1134	HA	TYR	68	7.528	
1.924	-7.788	1.00	0.00	BrD ATOM	1135	CB	TYR	68	5.918	
0.531	-7.538	1.00	0.00	BrD ATOM	1136	HB1	TYR	68	5.646	-
0.286	-8.188	1.00	0.00	BrD ATOM	1137	HB2	TYR	68	5.758	
0.234	-6.512	1.00	0.00	BrD ATOM	1138	CG	TYR	68	4.987	
1.689	-7.833	1.00	0.00	BrD ATOM	1139	CD1	TYR	68	5.378	
2.734	-8.664	1.00	0.00	BrD ATOM	1140	HD1	TYR	68	6.364	
2.717	-9.101	1.00	0.00	BrD ATOM	1141	CD2	TYR	68	3.712	
1.732	-7.283	1.00	0.00	BrD ATOM	1142	HD2	TYR	68	3.392	
0.927	-6.638	1.00	0.00	BrD ATOM	1143	CE1	TYR	68	4.526	
3.788	-8.933	1.00	0.00	BrD ATOM	1144	HE1	TYR	68	4.849	
4.591	-9.579	1.00	0.00	BrD ATOM	1145	CE2	TYR	68	2.855	
2.782	-7.549	1.00	0.00	BrD ATOM	1146	HE2	TYR	68	1.868	
2.797	-7.110	1.00	0.00	BrD ATOM	1147	CZ	TYR	68	3.267	
3.807	-8.374	1.00	0.00	BrD ATOM	1148	OH	TYR	68	2.416	
4.855	-8.639	1.00	0.00	BrD ATOM	1149	HH	TYR	68	2.457	
5.490	-7.920	1.00	0.00	BrD ATOM	1150	C	TYR	68	8.206	
0.327	-6.548	1.00	0.00	BrD ATOM	1151	O	TYR	68	8.001	
0.759	-5.416	1.00	0.00	BrD ATOM	1152	N	VAL	69	9.149	-
0.579	-6.816	1.00	0.00	BrD ATOM	1153	HN	VAL	69	9.268	-
0.888	-7.735	1.00	0.00	BrD ATOM	1154	CA	VAL	69	9.977	-
1.170	-5.769	1.00	0.00	BrD ATOM	1155	HA	VAL	69	9.397	-
1.941	-5.285	1.00	0.00	BrD ATOM	1156	CB	VAL	69	11.232	-
1.825	-6.366	1.00	0.00	BrD ATOM	1157	HB	VAL	69	10.922	-
2.537	-7.117	1.00	0.00	BrD ATOM	1158	CG1	VAL	69	12.107	-
0.778	-7.032	1.00	0.00	BrD ATOM	1159	HG11	VAL	69	11.701	-
0.536	-8.003	1.00	0.00	BrD ATOM	1160	HG12	VAL	69	13.108	-
1.165	-7.146	1.00	0.00	BrD ATOM	1161	HG13	VAL	69	12.131	
0.111	-6.420	1.00	0.00	BrD ATOM	1162	CG2	VAL	69	12.001	-
2.572	-5.291	1.00	0.00	BrD ATOM	1163	HG21	VAL	69	11.389	-
3.370	-4.899	1.00	0.00	BrD ATOM	1164	HG22	VAL	69	12.256	-
1.889	-4.494	1.00	0.00	BrD ATOM	1165	HG23	VAL	69	12.904	-
2.985	-5.716	1.00	0.00	BrD ATOM	1166	C	VAL	69	10.409	-
0.149	-4.717	1.00	0.00	BrD ATOM	1167	O	VAL	69	10.642	-
0.506	-3.565	1.00	0.00	BrD ATOM	1168	N	SER	70	10.508	
1.123	-5.110	1.00	0.00	BrD ATOM	1169	HN	SER	70	10.321	
1.350	-6.044	1.00	0.00	BrD ATOM	1170	CA	SER	70	10.909	
2.190	-4.189	1.00	0.00	BrD ATOM	1171	HA	SER	70	11.983	
2.146	-4.081	1.00	0.00	BrD ATOM	1172	CB	SER	70	10.525	
3.552	-4.767	1.00	0.00	BrD ATOM	1173	HB1	SER	70	11.246	
3.838	-5.518	1.00	0.00	BrD ATOM	1174	HB2	SER	70	9.546	
3.483	-5.216	1.00	0.00	BrD ATOM	1175	OG	SER	70	10.498	
4.547	-3.758	1.00	0.00	BrD ATOM	1176	HG	SER	70	10.908	
5.349	-4.088	1.00	0.00	BrD ATOM	1177	C	SER	70	10.268	
2.011	-2.810	1.00	0.00	BrD ATOM	1178	O	SER	70	9.252	
1.330	-2.674	1.00	0.00	BrD ATOM	1179	N	LYS	71	10.881	
2.605	-1.791	1.00	0.00	BrD ATOM	1180	HN	LYS	71	11.700	
3.118	-1.958	1.00	0.00	BrD ATOM	1181	CA	LYS	71	10.393	
2.470	-0.422	1.00	0.00	BrD ATOM	1182	HA	LYS	71	10.268	
1.415	-0.226	1.00	0.00	BrD ATOM	1183	CB	LYS	71	11.419	
3.036	0.564	1.00	0.00	BrD ATOM	1184	HB1	LYS	71	10.915	
3.287	1.485	1.00	0.00	BrD ATOM	1185	HB2	LYS	71	11.848	
3.933	0.142	1.00	0.00	BrD ATOM	1186	CG	LYS	71	12.550	
2.074	0.888	1.00	0.00	BrD ATOM	1187	HG1	LYS	71	13.359	
2.237	0.191	1.00	0.00	BrD ATOM	1188	HG2	LYS	71	12.188	
1.061	0.791	1.00	0.00	BrD ATOM	1189	CD	LYS	71	13.069	
2.279	2.302	1.00	0.00	BrD ATOM	1190	HD1	LYS	71	12.295	
2.001	3.002	1.00	0.00	BrD ATOM	1191	HD2	LYS	71	13.936	
1.652	2.452	1.00	0.00	BrD ATOM	1192	CE	LYS	71	13.460	
3.727	2.548	1.00	0.00	BrD ATOM	1193	HE1	LYS	71	14.024	
4.084	1.699	1.00	0.00	BrD ATOM	1194	HE2	LYS	71	12.561	
4.316	2.655	1.00	0.00	BrD ATOM	1195	NZ	LYS	71	14.287	
3.879	3.777	1.00	0.00	BrD ATOM	1196	HZ1	LYS	71	13.870	
3.334	4.558	1.00	0.00	BrD ATOM	1197	HZ2	LYS	71	14.334	
4.880	4.055	1.00	0.00	BrD ATOM	1198	HZ3	LYS	71	15.252	
3.533	3.604	1.00	0.00	BrD ATOM	1199	C	LYS	71	9.041	
3.160	-0.231	1.00	0.00	BrD ATOM	1200	O	LYS	71	7.992	
2.529	-0.362	1.00	0.00	BrD ATOM	1201	N	LYS	72	9.070	
4.447	0.109	1.00	0.00	BrD ATOM	1202	HN	LYS	72	9.933	
4.898	0.211	1.00	0.00	BrD ATOM	1203	CA	LYS	72	7.844	
5.201	0.351	1.00	0.00	BrD ATOM	1204	HA	LYS	72	7.396	
4.818	1.255	1.00	0.00	BrD ATOM	1205	CB	LYS	72	8.167	
6.684	0.547	1.00	0.00	BrD ATOM	1206	HB1	LYS	72	7.249	
7.216	0.752	1.00	0.00	BrD ATOM	1207	HB2	LYS	72	8.601	
7.070	-0.364	1.00	0.00	BrD ATOM	1208	CG	LYS	72	9.136	
6.950	1.687	1.00	0.00	BrD ATOM	1209	HG1	LYS	72	9.870	
6.158	1.715	1.00	0.00	BrD ATOM	1210	HG2	LYS	72	9.629	
7.895	1.515	1.00	0.00	BrD ATOM	1211	CD	LYS	72	8.419	
7.004	3.027	1.00	0.00	BrD ATOM	1212	HD1	LYS	72	7.833	
6.104	3.147	1.00	0.00	BrD ATOM	1213	HD2	LYS	72	9.155	
7.065	3.816	1.00	0.00	BrD ATOM	1214	CE	LYS	72	7.497	
8.208	3.117	1.00	0.00	BrD ATOM	1215	HE1	LYS	72	7.708	
8.869	2.288	1.00	0.00	BrD ATOM	1216	HE2	LYS	72	6.474	
7.868	3.054	1.00	0.00	BrD ATOM	1217	NZ	LYS	72	7.681	
8.956	4.391	1.00	0.00	BrD ATOM	1218	HZ1	LYS	72	8.150	
8.352	5.096	1.00	0.00	BrD ATOM	1219	HZ2	LYS	72	6.758	
9.256	4.766	1.00	0.00	BrD ATOM	1220	HZ3	LYS	72	8.267	
9.800	4.229	1.00	0.00	BrD ATOM	1221	C	LYS	72	6.852	
5.034	-0.794	1.00	0.00	BrD ATOM	1222	O	LYS	72	5.641	
5.001	-0.578	1.00	0.00	BrD ATOM	1223	N	LEU	73	7.370	
4.933	-2.011	1.00	0.00	BrD ATOM	1224	HN	LEU	73	8.343	
4.972	-2.121	1.00	0.00	BrD ATOM	1225	CA	LEU	73	6.528	
4.786	-3.191	1.00	0.00	BrD ATOM	1226	HA	LEU	73	5.982	
5.708	-3.323	1.00	0.00	BrD ATOM	1227	CB	LEU	73	7.394	
4.539	-4.427	1.00	0.00	BrD ATOM	1228	HB1	LEU	73	7.447	
3.474	-4.596	1.00	0.00	BrD ATOM	1229	HB2	LEU	73	8.389	
4.903	-4.219	1.00	0.00	BrD ATOM	1230	CG	LEU	73	6.896	
5.206	-5.711	1.00	0.00	BrD ATOM	1231	HG	LEU	73	5.937	
4.787	-5.978	1.00	0.00	BrD ATOM	1232	CD1	LEU	73	7.860	
4.943	-6.857	1.00	0.00	BrD ATOM	1233	HD11	LEU	73	8.166	
3.907	-6.840	1.00	0.00	BrD ATOM	1234	HD12	LEU	73	8.729	
5.576	-6.750	1.00	0.00	BrD ATOM	1235	HD13	LEU	73	7.372	
5.158	-7.796	1.00	0.00	BrD ATOM	1236	CD2	LEU	73	6.710	
6.701	-5.498	1.00	0.00	BrD ATOM	1237	HD21	LEU	73	7.104	
6.979	-4.531	1.00	0.00	BrD ATOM	1238	HD22	LEU	73	5.659	
6.943	-5.541	1.00	0.00	BrD ATOM	1239	HD23	LEU	73	7.237	
7.243	-6.270	1.00	0.00	BrD ATOM	1240	C	LEU	73	5.528	
3.645	-3.025	1.00	0.00	BrD ATOM	1241	O	LEU	73	4.318	
3.860	-3.061	1.00	0.00	BrD ATOM	1242	N	PHE	74	6.041	
2.432	-2.860	1.00	0.00	BrD ATOM	1243	HN	PHE	74	7.014	
2.322	-2.855	1.00	0.00	BrD ATOM	1244	CA	PHE	74	5.192	
1.253	-2.721	1.00	0.00	BrD ATOM	1245	HA	PHE	74	4.364	
1.359	-3.406	1.00	0.00	BrD ATOM	1246	CB	PHE	74	5.984	-
0.003	-3.084	1.00	0.00	BrD ATOM	1247	HB1	PHE	74	6.730	-
0.181	-2.324	1.00	0.00	BrD ATOM	1248	HB2	PHE	74	6.473	
0.154	-4.030	1.00	0.00	BrD ATOM	1249	CG	PHE	74	5.141	-
1.240	-3.202	1.00	0.00	BrD ATOM	1250	CD1	PHE	74	4.952	-
1.851	-4.431	1.00	0.00	BrD ATOM	1251	HD1	PHE	74	5.412	-
1.425	-5.311	1.00	0.00	BrD ATOM	1252	CD2	PHE	74	4.546	-
1.797	-2.082	1.00	0.00	BrD ATOM	1253	HD2	PHE	74	4.691	-
1.332	-1.118	1.00	0.00	BrD ATOM	1254	CE1	PHE	74	4.181	-
2.993	-4.542	1.00	0.00	BrD ATOM	1255	HE1	PHE	74	4.039	-
3.458	-5.506	1.00	0.00	BrD ATOM	1256	CE2	PHE	74	3.780	-
2.942	-2.186	1.00	0.00	BrD ATOM	1257	HE2	PHE	74	3.315	-
3.362	-1.304	1.00	0.00	BrD ATOM	1258	CZ	PHE	74	3.593	-
3.538	-3.418	1.00	0.00	BrD ATOM	1259	HZ	PHE	74	2.989	-
4.430	-3.502	1.00	0.00	BrD ATOM	1260	C	PHE	74	4.643	
1.116	-1.305	1.00	0.00	BrD ATOM	1261	O	PHE	74	3.503	
0.694	-1.111	1.00	0.00	BrD ATOM	1262	N	MET	75	5.466	
1.447	-0.318	1.00	0.00	BrD ATOM	1263	HN	MET	75	6.372	
1.755	-0.532	1.00	0.00	BrD ATOM	1264	CA	MET	75	5.072	
1.308	1.078	1.00	0.00	BrD ATOM	1265	HA	MET	75	4.603	
0.339	1.187	1.00	0.00	BrD ATOM	1266	CB	MET	75	6.300	
1.365	1.984	1.00	0.00	BrD ATOM	1267	HB1	MET	75	6.001	
1.734	2.954	1.00	0.00	BrD ATOM	1268	HB2	MET	75	7.021	
2.043	1.554	1.00	0.00	BrD ATOM	1269	CG	MET	75	6.966	
0.014	2.171	1.00	0.00	BrD ATOM	1270	HG1	MET	75	7.524	
0.029	3.092	1.00	0.00	BrD ATOM	1271	HG2	MET	75	6.200	-
0.744	2.231	1.00	0.00	BrD ATOM	1272	SD	MET	75	8.086	-
0.403	0.822	1.00	0.00	BrD ATOM	1273	CE	MET	75	8.173	-
2.182	1.002	1.00	0.00	BrD ATOM	1274	HE1	MET	75	7.211	-
2.557	1.319	1.00	0.00	BrD ATOM	1275	HE2	MET	75	8.917	-
2.435	1.741	1.00	0.00	BrD ATOM	1276	HE3	MET	75	8.438	-
2.630	0.054	1.00	0.00	BrD ATOM	1277	C	MET	75	4.067	
2.374	1.496	1.00	0.00	BrD ATOM	1278	O	MET	75	2.939	
2.052	1.866	1.00	0.00	BrD ATOM	1279	N	ALA	76	4.472	
3.642	1.462	1.00	0.00	BrD ATOM	1280	HN	ALA	76	5.380	
3.854	1.163	1.00	0.00	BrD ATOM	1281	CA	ALA	76	3.573	
4.722	1.861	1.00	0.00	BrD ATOM	1282	HA	ALA	76	3.409	
4.638	2.922	1.00	0.00	BrD ATOM	1283	CB	ALA	76	4.182	
6.083	1.595	1.00	0.00	BrD ATOM	1284	HB1	ALA	76	4.234	
6.252	0.531	1.00	0.00	BrD ATOM	1285	HB2	ALA	76	5.172	
6.125	2.021	1.00	0.00	BrD ATOM	1286	HB3	ALA	76	3.558	
6.842	2.049	1.00	0.00	BrD ATOM	1287	C	ALA	76	2.240	
4.601	1.147	1.00	0.00	BrD ATOM	1288	O	ALA	76	1.211	
5.026	1.666	1.00	0.00	BrD ATOM	1289	N	ASP	77	2.270	
4.014	-0.044	1.00	0.00	BrD ATOM	1290	HN	ASP	77	3.124	
3.685	-0.394	1.00	0.00	BrD ATOM	1291	CA	ASP	77	1.058	
3.804	-0.818	1.00	0.00	BrD ATOM	1292	HA	ASP	77	0.460	
4.701	-0.750	1.00	0.00	BrD ATOM	1293	CB	ASP	77	1.392	
3.534	-2.283	1.00	0.00	BrD ATOM	1294	HB1	ASP	77	2.196	
2.817	-2.334	1.00	0.00	BrD ATOM	1295	HB2	ASP	77	0.521	
3.128	-2.776	1.00	0.00	BrD ATOM	1296	CG	ASP	77	1.817	
4.790	-3.018	1.00	0.00	BrD ATOM	1297	OD1	ASP	77	1.353	
4.995	-4.159	1.00	0.00	BrD ATOM	1298	OD2	ASP	77	2.613	
5.569	-2.453	1.00	0.00	BrD ATOM	1299	C	ASP	77	0.268	
2.641	-0.243	1.00	0.00	BrD ATOM	1300	O	ASP	77	-0.950	
2.717	-0.113	1.00	0.00	BrD ATOM	1301	N	LEU	78	0.970	
1.569	0.119	1.00	0.00	BrD ATOM	1302	HN	LEU	78	1.944	
1.570	0.006	1.00	0.00	BrD ATOM	1303	CA	LEU	78	0.319	
0.411	0.711	1.00	0.00	BrD ATOM	1304	HA	LEU	78	-0.493	
0.122	0.060	1.00	0.00	BrD ATOM	1305	CB	LEU	78	1.280	-
0.761	0.849	1.00	0.00	BrD ATOM	1306	HB1	LEU	78	2.212	-
0.516	0.358	1.00	0.00	BrD ATOM	1307	HB2	LEU	78	1.480	-
0.922	1.900	1.00	0.00	BrD ATOM	1308	CG	LEU	78	0.736	-
2.052	0.259	1.00	0.00	BrD ATOM	1309	HG	LEU	78	-0.338	-
2.023	0.293	1.00	0.00	BrD ATOM	1310	CD1	LEU	78	1.143	-
2.189	-1.193	1.00	0.00	BrD ATOM	1311	HD11	LEU	78	1.413	-
3.213	-1.398	1.00	0.00	BrD ATOM	1312	HD12	LEU	78	1.985	-
1.543	-1.388	1.00	0.00	BrD ATOM	1313	HD13	LEU	78	0.317	-
1.901	-1.825	1.00	0.00	BrD ATOM	1314	CD2	LEU	78	1.189	-
3.236	1.078	1.00	0.00	BrD ATOM	1315	HD21	LEU	78	2.264	-
3.266	1.099	1.00	0.00	BrD ATOM	1316	HD22	LEU	78	0.808	-
4.145	0.640	1.00	0.00	BrD ATOM	1317	HD23	LEU	78	0.809	-
3.130	2.084	1.00	0.00	BrD ATOM	1318	C	LEU	78	-0.253	
0.769	2.066	1.00	0.00	BrD ATOM	1319	O	LEU	78	-1.459	
0.663	2.292	1.00	0.00	BrD ATOM	1320	N	GLN	79	0.611	
1.252	2.952	1.00	0.00	BrD ATOM	1321	HN	GLN	79	1.551	
1.353	2.700	1.00	0.00	BrD ATOM	1322	CA	GLN	79	0.171	
1.723	4.254	1.00	0.00	BrD ATOM	1323	HA	GLN	79	-0.198	
0.873	4.807	1.00	0.00	BrD ATOM	1324	CB	GLN	79	1.338	
2.361	5.015	1.00	0.00	BrD ATOM	1325	HB1	GLN	79	1.045	
2.520	6.038	1.00	0.00	BrD ATOM	1326	HB2	GLN	79	2.180	
1.686	4.991	1.00	0.00	BrD ATOM	1327	CG	GLN	79	1.781	
3.694	4.448	1.00	0.00	BrD ATOM	1328	HG1	GLN	79	1.501	
3.740	3.407	1.00	0.00	BrD ATOM	1329	HG2	GLN	79	2.855	
3.766	4.538	1.00	0.00	BrD ATOM	1330	CD	GLN	79	1.158	
4.871	5.172	1.00	0.00	BrD ATOM	1331	OE1	GLN	79	0.409	
5.651	4.585	1.00	0.00	BrD ATOM	1332	NE2	GLN	79	1.467	
5.005	6.457	1.00	0.00	BrD ATOM	1333	HE21	GLN	79	1.079	
5.757	6.950	1.00	0.00	BrD ATOM	1334	HE22	GLN	79	2.070	
4.346	6.859	1.00	0.00	BrD ATOM	1335	C	GLN	79	-0.960	
2.732	4.074	1.00	0.00	BrD ATOM	1336	O	GLN	79	-1.787	
2.924	4.964	1.00	0.00	BrD ATOM	1337	N	ARG	80	-0.997	
3.356	2.895	1.00	0.00	BrD ATOM	1338	HN	ARG	80	-0.321	
3.140	2.216	1.00	0.00	BrD ATOM	1339	CA	ARG	80	-2.048	
4.306	2.560	1.00	0.00	BrD ATOM	1340	HA	ARG	80	-2.275	
4.880	3.447	1.00	0.00	BrD ATOM	1341	CB	ARG	80	-1.579	
5.253	1.451	1.00	0.00	BrD ATOM	1342	HB1	ARG	80	-2.401	
5.429	0.773	1.00	0.00	BrD ATOM	1343	HB2	ARG	80	-0.770	
4.785	0.908	1.00	0.00	BrD ATOM	1344	CG	ARG	80	-1.092	
6.598	1.964	1.00	0.00	BrD ATOM	1345	HG1	ARG	80	-0.290	
6.434	2.669	1.00	0.00	BrD ATOM	1346	HG2	ARG	80	-0.728	
7.180	1.131	1.00	0.00	BrD ATOM	1347	CD	ARG	80	-2.206	
7.367	2.654	1.00	0.00	BrD ATOM	1348	HD1	ARG	80	-3.054	
6.711	2.780	1.00	0.00	BrD ATOM	1349	HD2	ARG	80	-2.486	
8.203	2.031	1.00	0.00	BrD ATOM	1350	NE	ARG	80	-1.796	
7.867	3.962	1.00	0.00	BrD ATOM	1351	HE	ARG	80	-0.837	
7.874	4.166	1.00	0.00	BrD ATOM	1352	CZ	ARG	80	-2.648	
8.310	4.881	1.00	0.00	BrD ATOM	1353	NH1	ARG	80	-2.198	
8.750	6.047	1.00	0.00	BrD ATOM	1354	HH11	ARG	80	-1.216	
8.749	6.237	1.00	0.00	BrD ATOM	1355	HH12	ARG	80	-2.840	
9.083	6.738	1.00	0.00	BrD ATOM	1356	NH2	ARG	80	-3.950	
8.314	4.633	1.00	0.00	BrD ATOM	1357	HH21	ARG	80	-4.590	
8.647	5.326	1.00	0.00	BrD ATOM	1358	HH22	ARG	80	-4.293	
7.983	3.754	1.00	0.00	BrD ATOM	1359	C	ARG	80	-3.305	
3.568	2.114	1.00	0.00	BrD ATOM	1360	O	ARG	80	-4.417	
3.922	2.502	1.00	0.00	BrD ATOM	1361	N	VAL	81	-3.116	
2.536	1.293	1.00	0.00	BrD ATOM	1362	HN	VAL	81	-2.203	
2.301	1.024	1.00	0.00	BrD ATOM	1363	CA	VAL	81	-4.231	
1.738	0.799	1.00	0.00	BrD ATOM	1364	HA	VAL	81	-4.849	
2.374	0.182	1.00	0.00	BrD ATOM	1365	CB	VAL	81	-3.742	
0.556	-0.063	1.00	0.00	BrD ATOM	1366	HB	VAL	81	-3.104	-
0.068	0.546	1.00	0.00	BrD ATOM	1367	CG1	VAL	81	-2.926	
1.057	-1.244	1.00	0.00	BrD ATOM	1368	HG11	VAL	81	-3.462	
0.861	-2.159	1.00	0.00	BrD ATOM	1369	HG12	VAL	81	-1.973	
0.545	-1.268	1.00	0.00	BrD ATOM	1370	HG13	VAL	81	-2.763	
2.119	-1.146	1.00	0.00	BrD ATOM	1371	CG2	VAL	81	-4.916	-
0.287	-0.539	1.00	0.00	BrD ATOM	1372	HG21	VAL	81	-4.851	-
0.425	-1.608	1.00	0.00	BrD ATOM	1373	HG22	VAL	81	-5.841	
0.215	-0.297	1.00	0.00	BrD ATOM	1374	HG23	VAL	81	-4.890	-
1.250	-0.050	1.00	0.00	BrD ATOM	1375	C	VAL	81	-5.069	
1.206	1.957	1.00	0.00	BrD ATOM	1376	O	VAL	81	-6.293	
1.339	1.964	1.00	0.00	BrD ATOM	1377	N	PHE	82	-4.400	
0.610	2.937	1.00	0.00	BrD ATOM	1378	HN	PHE	82	-3.424	
0.540	2.876	1.00	0.00	BrD ATOM	1379	CA	PHE	82	-5.079	
0.070	4.108	1.00	0.00	BrD ATOM	1380	HA	PHE	82	-5.919	-

0.514	3.764	1.00	0.00	BrD ATOM	1381	CB	PHE	82	-4.131
0.833	4.899	1.00	0.00	BrD ATOM	1382	HB1	PHE	82	-3.486
0.220	5.511	1.00	0.00	BrD ATOM	1383	HB2	PHE	82	-4.712
1.484	5.536	1.00	0.00	BrD ATOM	1384	CG	PHE	82	-3.261
1.695	4.028	1.00	0.00	BrD ATOM	1385	CD1	PHE	82	-1.979
2.035	4.428	1.00	0.00	BrD ATOM	1386	HD1	PHE	82	-1.606
1.677	5.376	1.00	0.00	BrD ATOM	1387	CD2	PHE	82	-3.725
2.162	2.809	1.00	0.00	BrD ATOM	1388	HD2	PHE	82	-4.723
1.901	2.487	1.00	0.00	BrD ATOM	1389	CE1	PHE	82	-1.177
2.827	3.628	1.00	0.00	BrD ATOM	1390	HE1	PHE	82	-0.179
3.086	3.951	1.00	0.00	BrD ATOM	1391	CE2	PHE	82	-2.928
2.952	2.004	1.00	0.00	BrD ATOM	1392	HE2	PHE	82	-3.302
3.311	1.057	1.00	0.00	BrD ATOM	1393	CZ	PHE	82	-1.651
3.284	2.413	1.00	0.00	BrD ATOM	1394	HZ	PHE	82	-1.029
3.906	1.789	1.00	0.00	BrD ATOM	1395	C	PHE	82	-5.594
1.197	4.994	1.00	0.00	BrD ATOM	1396	O	PHE	82	-6.745
1.180	5.431	1.00	0.00	BrD ATOM	1397	N	THR	83	-4.740
2.185	5.241	1.00	0.00	BrD ATOM	1398	HN	THR	83	-3.841
2.149	4.852	1.00	0.00	BrD ATOM	1399	CA	THR	83	-5.119
3.337	6.048	1.00	0.00	BrD ATOM	1400	HA	THR	83	-5.427
2.977	7.019	1.00	0.00	BrD ATOM	1401	CB	THR	83	-3.927
4.282	6.216	1.00	0.00	BrD ATOM	1402	HB	THR	83	-3.525
4.516	5.240	1.00	0.00	BrD ATOM	1403	OG1	THR	83	-2.905
3.666	6.982	1.00	0.00	BrD ATOM	1404	HG1	THR	83	-3.138
3.699	7.913	1.00	0.00	BrD ATOM	1405	CG2	THR	83	-4.283
5.589	6.892	1.00	0.00	BrD ATOM	1406	HG21	THR	83	-4.813
6.222	6.196	1.00	0.00	BrD ATOM	1407	HG22	THR	83	-3.379
6.085	7.214	1.00	0.00	BrD ATOM	1408	HG23	THR	83	-4.910
5.391	7.749	1.00	0.00	BrD ATOM	1409	C	THR	83	-6.286
4.077	5.402	1.00	0.00	BrD ATOM	1410	O	THR	83	-7.073
4.735	6.082	1.00	0.00	BrD ATOM	1411	N	ASN	84	-6.391
3.956	4.082	1.00	0.00	BrD ATOM	1412	HN	ASN	84	-5.732
3.418	3.597	1.00	0.00	BrD ATOM	1413	CA	ASN	84	-7.458
4.609	3.334	1.00	0.00	BrD ATOM	1414	HA	ASN	84	-7.546
5.622	3.698	1.00	0.00	BrD ATOM	1415	CB	ASN	84	-7.113
4.640	1.844	1.00	0.00	BrD ATOM	1416	HB1	ASN	84	-7.095
3.629	1.464	1.00	0.00	BrD ATOM	1417	HB2	ASN	84	-6.138
5.086	1.716	1.00	0.00	BrD ATOM	1418	CG	ASN	84	-8.115
5.438	1.035	1.00	0.00	BrD ATOM	1419	OD1	ASN	84	-9.269
5.596	1.433	1.00	0.00	BrD ATOM	1420	ND2	ASN	84	-7.677
5.945	-0.111	1.00	0.00	BrD ATOM	1421	HD21	ASN	84	-6.745
5.778	-0.365	1.00	0.00	BrD ATOM	1422	HD22	ASN	84	-8.302
6.465	-0.655	1.00	0.00	BrD ATOM	1423	C	ASN	84	-8.788
3.893	3.544	1.00	0.00	BrD ATOM	1424	O	ASN	84	-9.745
4.477	4.051	1.00	0.00	BrD ATOM	1425	N	CYS	85	-8.842
2.623	3.150	1.00	0.00	BrD ATOM	1426	HN	CYS	85	-8.046
2.213	2.751	1.00	0.00	BrD ATOM	1427	CA	CYS	85	-10.058
1.827	3.291	1.00	0.00	BrD ATOM	1428	HA	CYS	85	-10.778
2.193	2.575	1.00	0.00	BrD ATOM	1429	CB	CYS	85	-9.765
0.354	2.995	1.00	0.00	BrD ATOM	1430	HB1	CYS	85	-8.806
0.277	2.504	1.00	0.00	BrD ATOM	1431	HB2	CYS	85	-9.732
0.193	3.926	1.00	0.00	BrD ATOM	1432	SG	CYS	85	-10.992
0.444	1.933	1.00	0.00	BrD ATOM	1433	HG	CYS	85	-10.844
0.144	1.033	1.00	0.00	BrD ATOM	1434	C	CYS	85	-10.645
1.965	4.692	1.00	0.00	BrD ATOM	1435	O	CYS	85	-11.842
2.203	4.854	1.00	0.00	BrD ATOM	1436	N	LYS	86	-9.794
1.817	5.701	1.00	0.00	BrD ATOM	1437	HN	LYS	86	-8.852
1.626	5.508	1.00	0.00	BrD ATOM	1438	CA	LYS	86	-10.228
1.921	7.089	1.00	0.00	BrD ATOM	1439	HA	LYS	86	-11.111
1.310	7.203	1.00	0.00	BrD ATOM	1440	CB	LYS	86	-9.137
1.395	8.023	1.00	0.00	BrD ATOM	1441	HB1	LYS	86	-9.063
0.325	7.903	1.00	0.00	BrD ATOM	1442	HB2	LYS	86	-9.416
1.616	9.043	1.00	0.00	BrD ATOM	1443	CG	LYS	86	-7.768
1.998	7.763	1.00	0.00	BrD ATOM	1444	HG1	LYS	86	-7.809
2.583	6.857	1.00	0.00	BrD ATOM	1445	HG2	LYS	86	-7.050
1.199	7.645	1.00	0.00	BrD ATOM	1446	CD	LYS	86	-7.325
2.892	8.910	1.00	0.00	BrD ATOM	1447	HD1	LYS	86	-6.477
3.478	8.590	1.00	0.00	BrD ATOM	1448	HD2	LYS	86	-8.140
3.548	9.177	1.00	0.00	BrD ATOM	1449	CE	LYS	86	-6.929
2.076	10.130	1.00	0.00	BrD ATOM	1450	HE1	LYS	86	-7.418
1.114	10.078	1.00	0.00	BrD ATOM	1451	HE2	LYS	86	-5.858
1.935	10.120	1.00	0.00	BrD ATOM	1452	NZ	LYS	86	-7.317
2.749	11.400	1.00	0.00	BrD ATOM	1453	HZ1	LYS	86	-8.019
2.174	11.909	1.00	0.00	BrD ATOM	1454	HZ2	LYS	86	-7.729
3.682	11.199	1.00	0.00	BrD ATOM	1455	HZ3	LYS	86	-6.482
2.874	12.008	1.00	0.00	BrD ATOM	1456	C	LYS	86	-10.579
3.360	7.456	1.00	0.00	BrD ATOM	1457	O	LYS	86	-11.293
3.603	8.429	1.00	0.00	BrD ATOM	1458	N	GLU	87	-10.076
4.314	6.676	1.00	0.00	BrD ATOM	1459	HN	GLU	87	-9.514
4.064	5.914	1.00	0.00	BrD ATOM	1460	CA	GLU	87	-10.350
5.724	6.926	1.00	0.00	BrD ATOM	1461	HA	GLU	87	-10.510
5.848	7.986	1.00	0.00	BrD ATOM	1462	CB	GLU	87	-9.158
6.583	6.498	1.00	0.00	BrD ATOM	1463	HB1	GLU	87	-9.513
7.572	6.249	1.00	0.00	BrD ATOM	1464	HB2	GLU	87	-8.706
6.141	5.622	1.00	0.00	BrD ATOM	1465	CG	GLU	87	-8.088
6.716	7.570	1.00	0.00	BrD ATOM	1466	HG1	GLU	87	-7.954
5.757	8.048	1.00	0.00	BrD ATOM	1467	HG2	GLU	87	-7.163
7.016	7.101	1.00	0.00	BrD ATOM	1468	CD	GLU	87	-8.446
7.740	8.629	1.00	0.00	BrD ATOM	1469	OE1	GLU	87	-9.092
8.751	8.283	1.00	0.00	BrD ATOM	1470	OE2	GLU	87	-8.079
7.531	9.805	1.00	0.00	BrD ATOM	1471	C	GLU	87	-11.604
6.172	6.183	1.00	0.00	BrD ATOM	1472	O	GLU	87	-12.542
6.692	6.787	1.00	0.00	BrD ATOM	1473	N	TYR	88	-11.617
5.962	4.871	1.00	0.00	BrD ATOM	1474	HN	TYR	88	-10.840
5.541	4.446	1.00	0.00	BrD ATOM	1475	CA	TYR	88	-12.759
6.339	4.046	1.00	0.00	BrD ATOM	1476	HA	TYR	88	-13.070
7.330	4.344	1.00	0.00	BrD ATOM	1477	CB	TYR	88	-12.361
6.363	2.568	1.00	0.00	BrD ATOM	1478	HB1	TYR	88	-11.310
6.602	2.489	1.00	0.00	BrD ATOM	1479	HB2	TYR	88	-12.537
5.388	2.139	1.00	0.00	BrD ATOM	1480	CG	TYR	88	-13.128
7.376	1.748	1.00	0.00	BrD ATOM	1481	CD1	TYR	88	-12.606
8.640	1.505	1.00	0.00	BrD ATOM	1482	HD1	TYR	88	-11.639
8.896	1.914	1.00	0.00	BrD ATOM	1483	CD2	TYR	88	-14.372
7.066	1.213	1.00	0.00	BrD ATOM	1484	HD2	TYR	88	-14.792
6.087	1.392	1.00	0.00	BrD ATOM	1485	CE1	TYR	88	-13.302
9.568	0.755	1.00	0.00	BrD ATOM	1486	HE1	TYR	88	-12.880
10.546	0.578	1.00	0.00	BrD ATOM	1487	CE2	TYR	88	-15.075
7.989	0.462	1.00	0.00	BrD ATOM	1488	HE2	TYR	88	-16.042
7.730	0.055	1.00	0.00	BrD ATOM	1489	CZ	TYR	88	-14.536
9.238	0.236	1.00	0.00	BrD ATOM	1490	OH	TYR	88	-15.233
10.159	-0.512	1.00	0.00	BrD ATOM	1491	HH	TYR	88	-15.995
10.465	-0.014	1.00	0.00	BrD ATOM	1492	C	TYR	88	-13.923
5.374	4.256	1.00	0.00	BrD ATOM	1493	O	TYR	88	-14.369
4.711	3.320	1.00	0.00	BrD ATOM	1494	N	ASN	89	-14.408
5.298	5.492	1.00	0.00	BrD ATOM	1495	HN	ASN	89	-14.012
5.852	6.195	1.00	0.00	BrD ATOM	1496	CA	ASN	89	-15.518
4.414	5.827	1.00	0.00	BrD ATOM	1497	HA	ASN	89	-16.155
4.336	4.958	1.00	0.00	BrD ATOM	1498	CB	ASN	89	-14.996
3.023	6.192	1.00	0.00	BrD ATOM	1499	HB1	ASN	89	-15.816
2.421	6.557	1.00	0.00	BrD ATOM	1500	HB2	ASN	89	-14.578
2.559	5.311	1.00	0.00	BrD ATOM	1501	CG	ASN	89	-13.925
3.072	7.263	1.00	0.00	BrD ATOM	1502	OD1	ASN	89	-13.552
4.147	7.734	1.00	0.00	BrD ATOM	1503	ND2	ASN	89	-13.424
1.906	7.655	1.00	0.00	BrD ATOM	1504	HD21	ASN	89	-13.770
1.090	7.236	1.00	0.00	BrD ATOM	1505	HD22	ASN	89	-12.731
1.909	8.347	1.00	0.00	BrD ATOM	1506	C	ASN	89	-16.332
4.982	6.985	1.00	0.00	BrD ATOM	1507	O	ASN	89	-16.088
4.658	8.147	1.00	0.00	BrD ATOM	1508	N	ALA	90	-17.296
5.836	6.659	1.00	0.00	BrD ATOM	1509	HN	ALA	90	-17.438
6.058	5.715	1.00	0.00	BrD ATOM	1510	CA	ALA	90	-18.142
6.458	7.670	1.00	0.00	BrD ATOM	1511	HA	ALA	90	-17.525
7.122	8.258	1.00	0.00	BrD ATOM	1512	CB	ALA	90	-19.228
7.291	7.006	1.00	0.00	BrD ATOM	1513	HB1	ALA	90	-19.280
7.045	5.956	1.00	0.00	BrD ATOM	1514	HB2	ALA	90	-18.997
8.340	7.119	1.00	0.00	BrD ATOM	1515	HB3	ALA	90	-20.179
7.081	7.473	1.00	0.00	BrD ATOM	1516	C	ALA	90	-18.764
5.414	8.594	1.00	0.00	BrD ATOM	1517	O	ALA	90	-18.728
5.557	9.817	1.00	0.00	BrD ATOM	1518	N	PRO	91	-19.346
4.347	8.021	1.00	0.00	BrD ATOM	1519	CA	PRO	91	-20.000
3.290	8.783	1.00	0.00	BrD ATOM	1520	HA	PRO	91	-20.495
3.681	9.659	1.00	0.00	BrD ATOM	1521	CB	PRO	91	-21.048
2.740	7.800	1.00	0.00	BrD ATOM	1522	HB1	PRO	91	-20.932
1.670	7.715	1.00	0.00	BrD ATOM	1523	HB2	PRO	91	-22.038
2.966	8.169	1.00	0.00	BrD ATOM	1524	CG	PRO	91	-20.794
3.419	6.483	1.00	0.00	BrD ATOM	1525	HG1	PRO	91	-20.778
2.684	5.692	1.00	0.00	BrD ATOM	1526	HG2	PRO	91	-21.566
4.151	6.296	1.00	0.00	BrD ATOM	1527	CD	PRO	91	-19.456
4.095	6.587	1.00	0.00	BrD ATOM	1528	HD1	PRO	91	-18.670
3.436	6.247	1.00	0.00	BrD ATOM	1529	HD2	PRO	91	-19.450
5.018	6.027	1.00	0.00	BrD ATOM	1530	C	PRO	91	-19.035
2.183	9.196	1.00	0.00	BrD ATOM	1531	O	PRO	91	-19.458
1.079	9.540	1.00	0.00	BrD ATOM	1532	N	GLU	92	-17.736
2.481	9.160	1.00	0.00	BrD ATOM	1533	HN	GLU	92	-17.462
3.377	8.873	1.00	0.00	BrD ATOM	1534	CA	GLU	92	-16.703
1.506	9.521	1.00	0.00	BrD ATOM	1535	HA	GLU	92	-15.779
1.838	9.083	1.00	0.00	BrD ATOM	1536	CB	GLU	92	-16.529
1.439	11.039	1.00	0.00	BrD ATOM	1537	HB1	GLU	92	-15.786
0.690	11.272	1.00	0.00	BrD ATOM	1538	HB2	GLU	92	-16.182
2.399	11.393	1.00	0.00	BrD ATOM	1539	CG	GLU	92	-17.805
1.092	11.778	1.00	0.00	BrD ATOM	1540	HG1	GLU	92	-18.550
1.831	11.537	1.00	0.00	BrD ATOM	1541	HG2	GLU	92	-18.143
0.119	11.452	1.00	0.00	BrD ATOM	1542	CD	GLU	92	-17.622
1.062	13.283	1.00	0.00	BrD ATOM	1543	OE1	GLU	92	-18.536
1.517	14.001	1.00	0.00	BrD ATOM	1544	OE2	GLU	92	-16.564
0.581	13.743	1.00	0.00	BrD ATOM	1545	C	GLU	92	-17.029
0.119	8.974	1.00	0.00	BrD ATOM	1546	O	GLU	92	-16.862
0.887	9.663	1.00	0.00	BrD ATOM	1547	N	SER	93	-17.508
0.081	7.736	1.00	0.00	BrD ATOM	1548	HN	SER	93	-17.620
0.919	7.240	1.00	0.00	BrD ATOM	1549	CA	SER	93	-17.863
1.176	7.092	1.00	0.00	BrD ATOM	1550	HA	SER	93	-18.677
1.616	7.649	1.00	0.00	BrD ATOM	1551	CB	SER	93	-18.317
0.925	5.653	1.00	0.00	BrD ATOM	1552	HB1	SER	93	-17.475
1.052	4.986	1.00	0.00	BrD ATOM	1553	HB2	SER	93	-18.695
0.084	5.568	1.00	0.00	BrD ATOM	1554	OG	SER	93	-19.339
1.830	5.274	1.00	0.00	BrD ATOM	1555	HG	SER	93	-19.610
1.648	4.371	1.00	0.00	BrD ATOM	1556	C	SER	93	-16.686
2.141	7.099	1.00	0.00	BrD ATOM	1557	O	SER	93	-15.700
1.932	7.807	1.00	0.00	BrD ATOM	1558	N	GLU	94	-16.790
3.194	6.298	1.00	0.00	BrD ATOM	1559	HN	GLU	94	-17.598
3.303	5.754	1.00	0.00	BrD ATOM	1560	CA	GLU	94	-15.729
4.186	6.204	1.00	0.00	BrD ATOM	1561	HA	GLU	94	-15.574
4.596	7.191	1.00	0.00	BrD ATOM	1562	CB	GLU	94	-16.144
5.314	5.258	1.00	0.00	BrD ATOM	1563	HB1	GLU	94	-16.411
4.887	4.302	1.00	0.00	BrD ATOM	1564	HB2	GLU	94	-17.006
5.817	5.671	1.00	0.00	BrD ATOM	1565	CG	GLU	94	-15.054
6.346	5.031	1.00	0.00	BrD ATOM	1566	HG1	GLU	94	-14.187
5.849	4.622	1.00	0.00	BrD ATOM	1567	HG2	GLU	94	-14.797
6.793	5.981	1.00	0.00	BrD ATOM	1568	CD	GLU	94	-15.479
7.446	4.078	1.00	0.00	BrD ATOM	1569	OE1	GLU	94	-16.617
7.382	3.568	1.00	0.00	BrD ATOM	1570	OE2	GLU	94	-14.673
8.370	3.840	1.00	0.00	BrD ATOM	1571	C	GLU	94	-14.422
3.556	5.725	1.00	0.00	BrD ATOM	1572	O	GLU	94	-13.351
4.143	5.876	1.00	0.00	BrD ATOM	1573	N	TYR	95	-14.510
2.357	5.150	1.00	0.00	BrD ATOM	1574	HN	TYR	95	-15.387
1.930	5.057	1.00	0.00	BrD ATOM	1575	CA	TYR	95	-13.327
1.658	4.663	1.00	0.00	BrD ATOM	1576	HA	TYR	95	-12.919
2.227	3.841	1.00	0.00	BrD ATOM	1577	CB	TYR	95	-13.704
0.260	4.166	1.00	0.00	BrD ATOM	1578	HB1	TYR	95	-14.448
0.160	4.827	1.00	0.00	BrD ATOM	1579	HB2	TYR	95	-12.825
0.367	4.176	1.00	0.00	BrD ATOM	1580	CG	TYR	95	-14.270
0.244	2.762	1.00	0.00	BrD ATOM	1581	CD1	TYR	95	-14.933
1.350	2.245	1.00	0.00	BrD ATOM	1582	HD1	TYR	95	-15.041
2.232	2.859	1.00	0.00	BrD ATOM	1583	CD2	TYR	95	-14.141
0.880	1.956	1.00	0.00	BrD ATOM	1584	HD2	TYR	95	-13.630
1.749	2.343	1.00	0.00	BrD ATOM	1585	CE1	TYR	95	-15.450
1.337	0.963	1.00	0.00	BrD ATOM	1586	HE1	TYR	95	-15.961
2.208	0.579	1.00	0.00	BrD ATOM	1587	CE2	TYR	95	-14.656
0.901	0.673	1.00	0.00	BrD ATOM	1588	HE2	TYR	95	-14.546
1.785	0.062	1.00	0.00	BrD ATOM	1589	CZ	TYR	95	-15.310
0.210	0.182	1.00	0.00	BrD ATOM	1590	OH	TYR	95	-15.823
0.193	-1.095	1.00	0.00	BrD ATOM	1591	HH	TYR	95	-16.730
0.508	-1.079	1.00	0.00	BrD ATOM	1592	C	TYR	95	-12.274
1.552	5.761	1.00	0.00	BrD ATOM	1593	O	TYR	95	-11.076
1.511	5.485	1.00	0.00	BrD ATOM	1594	N	TYR	96	-12.733
1.513	7.007	1.00	0.00	BrD ATOM	1595	HN	TYR	96	-13.700
1.553	7.161	1.00	0.00	BrD ATOM	1596	CA	TYR	96	-11.835
1.421	8.152	1.00	0.00	BrD ATOM	1597	HA	TYR	96	-11.033
0.746	7.889	1.00	0.00	BrD ATOM	1598	CB	TYR	96	-12.581
0.860	9.365	1.00	0.00	BrD ATOM	1599	HB1	TYR	96	-13.397
1.522	9.615	1.00	0.00	BrD ATOM	1600	HB2	TYR	96	-12.977
0.114	9.116	1.00	0.00	BrD ATOM	1601	CG	TYR	96	-11.712
0.708	10.594	1.00	0.00	BrD ATOM	1602	CD1	TYR	96	-10.351
0.458	10.477	1.00	0.00	BrD ATOM	1603	HD1	TYR	96	-9.918
0.375	9.493	1.00	0.00	BrD ATOM	1604	CD2	TYR	96	-12.252
0.815	11.870	1.00	0.00	BrD ATOM	1605	HD2	TYR	96	-13.308
1.009	11.979	1.00	0.00	BrD ATOM	1606	CE1	TYR	96	-9.551
0.319	11.594	1.00	0.00	BrD ATOM	1607	HE1	TYR	96	-8.495
0.125	11.480	1.00	0.00	BrD ATOM	1608	CE2	TYR	96	-11.458
0.677	12.993	1.00	0.00	BrD ATOM	1609	HE2	TYR	96	-11.895
0.763	13.977	1.00	0.00	BrD ATOM	1610	CZ	TYR	96	-10.109
0.429	12.849	1.00	0.00	BrD ATOM	1611	OH	TYR	96	-9.315
0.291	13.964	1.00	0.00	BrD ATOM	1612	HH	TYR	96	-8.479
0.742	13.821	1.00	0.00	BrD ATOM	1613	C	TYR	96	-11.238
2.783	8.497	1.00	0.00	BrD ATOM	1614	O	TYR	96	-10.238
2.868	9.211	1.00	0.00	BrD ATOM	1615	N	LYS	97	-11.857
3.849	7.995	1.00	0.00	BrD ATOM	1616	HN	LYS	97	-12.650
3.728	7.435	1.00	0.00	BrD ATOM	1617	CA	LYS	97	-11.390
5.200	8.256	1.00	0.00	BrD ATOM	1618	HA	LYS	97	-11.067
5.248	9.285	1.00	0.00	BrD ATOM	1619	CB	LYS	97	-12.547
6.183	8.044	1.00	0.00	BrD ATOM	1620	HB1	LYS	97	-13.075
5.901	7.145	1.00	0.00	BrD ATOM	1621	HB2	LYS	97	-13.223
6.110	8.884	1.00	0.00	BrD ATOM	1622	CG	LYS	97	-12.120
7.632	7.902	1.00	0.00	BrD ATOM	1623	HG1	LYS	97	-11.914
7.826	6.862	1.00	0.00	BrD ATOM	1624	HG2	LYS	97	-11.227
7.795	8.487	1.00	0.00	BrD ATOM	1625	CD	LYS	97	-13.205
8.584	8.379	1.00	0.00	BrD ATOM	1626	HD1	LYS	97	-14.156
8.255	7.989	1.00	0.00	BrD ATOM	1627	HD2	LYS	97	-12.986
9.576	8.013	1.00	0.00	BrD ATOM	1628	CE	LYS	97	-13.282
8.625	9.897	1.00	0.00	BrD ATOM	1629	HE1	LYS	97	-13.091
7.633	10.281	1.00	0.00	BrD ATOM	1630	HE2	LYS	97	-12.527
9.304	10.265	1.00	0.00	BrD ATOM	1631	NZ	LYS	97	-14.617
9.080	10.374	1.00	0.00	BrD ATOM	1632	HZ1	LYS	97	-14.760
10.082	10.135	1.00	0.00	BrD ATOM	1633	HZ2	LYS	97	-15.368
8.517	9.926	1.00	0.00	BrD ATOM	1634	HZ3	LYS	97	-14.685
8.968	11.406	1.00	0.00	BrD ATOM	1635	C	LYS	97	-10.212
5.550	7.349	1.00	0.00	BrD ATOM	1636	O	LYS	97	-9.123
5.870	7.824	1.00	0.00	BrD ATOM	1637	N	CYS	98	-10.443
5.490	6.040	1.00	0.00	BrD ATOM	1638	HN	CYS	98	-11.334
5.233	5.724	1.00	0.00	BrD ATOM	1639	CA	CYS	98	-9.408
5.811	5.062	1.00	0.00	BrD ATOM	1640	HA	CYS	98	-9.253
6.879	5.086	1.00	0.00	BrD ATOM	1641	CB	CYS	98	-9.862
5.408	3.660	1.00	0.00	BrD ATOM	1642	HB1	CYS	98	-9.000
5.351	3.012	1.00	0.00	BrD ATOM	1643	HB2	CYS	98	-10.337
4.440	3.707	1.00	0.00	BrD ATOM	1644	SG	CYS	98	-11.036
6.562	2.916	1.00	0.00	BrD ATOM	1645	HG	CYS	98	-11.755
6.695	3.538	1.00	0.00	BrD ATOM	1646	C	CYS	98	-8.093
5.121	5.405	1.00	0.00	BrD ATOM	1647	O	CYS	98	-7.040
5.757	5.442	1.00	0.00	BrD ATOM	1648	N	ALA	99	-8.159
3.820	5.668	1.00	0.00	BrD ATOM	1649	HN	ALA	99	-9.028
3.368	5.644	1.00	0.00	BrD ATOM	1650	CA	ALA	99	-6.975
3.066	6.046	1.00	0.00	BrD ATOM	1651	HA	ALA	99	-6.290
3.066	5.214	1.00	0.00	BrD ATOM	1652	CB	ALA	99	-7.339
1.623	6.363	1.00	0.00	BrD ATOM	1653	HB1	ALA	99	-8.281
1.597	6.890	1.00	0.00	BrD ATOM	1654	HB2	ALA	99	-7.425
1.063	5.443	1.00	0.00	BrD ATOM	1655	HB3	ALA	99	-6.568
1.185	6.980	1.00	0.00	BrD ATOM	1656	C	ALA	99	-6.293
3.721	7.232	1.00	0.00	BrD ATOM	1657	O	ALA	99	-5.091
3.963	7.207	1.00	0.00	BrD ATOM	1658	N	ASN	100	-7.080
4.054	8.247	1.00	0.00	BrD ATOM	1659	HN	ASN	100	-8.039
3.848	8.199	1.00	0.00	BrD ATOM	1660	CA	ASN	100	-6.550
4.702	9.438	1.00	0.00	BrD ATOM	1661	HA	ASN	100	-5.922
3.988	9.949	1.00	0.00	BrD ATOM	1662	CB	ASN	100	-7.697

REPLACEMENT SHEET

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5.116  10.363  1.00  0.00      BrD ATOM   1663  HB1 ASN   100      -8.587  -
4.570  10.089  1.00  0.00      BrD ATOM   1664  HB2 ASN   100      -7.879  -
6.174  10.247  1.00  0.00      BrD ATOM   1665  CG  ASN   100      -7.395  -
4.838  11.822  1.00  0.00      BrD ATOM   1666  OD1 ASN   100      -7.283  -
3.684  12.236  1.00  0.00      BrD ATOM   1667  ND2 ASN   100      -7.266  -
5.898  12.611  1.00  0.00      BrD ATOM   1668 HD21 ASN   100      -7.370  -
6.787  12.212  1.00  0.00      BrD ATOM   1669 HD22 ASN   100      -7.072  -
5.748  13.560  1.00  0.00      BrD ATOM   1670  C   ASN   100      -5.711  -
5.922   9.069  1.00  0.00      BrD ATOM   1671  O   ASN   100      -4.740  -
6.251   9.753  1.00  0.00      BrD ATOM   1672  N   ILE   101      -6.088  -
6.587   7.981  1.00  0.00      BrD ATOM   1673  HN  ILE   101      -6.870  -
6.277   7.481  1.00  0.00      BrD ATOM   1674  CA  ILE   101      -5.377  -
7.777   7.524  1.00  0.00      BrD ATOM   1675  HA  ILE   101      -5.132  -
8.370   8.394  1.00  0.00      BrD ATOM   1676  CB  ILE   101      -6.254  -
8.636   6.594  1.00  0.00      BrD ATOM   1677  HB  ILE   101      -6.469  -
8.061   5.705  1.00  0.00      BrD ATOM   1678 CG1  ILE   101      -7.569  -
8.996   7.290  1.00  0.00      BrD ATOM   1679 HG11 ILE   101      -8.112  -
8.090   7.513  1.00  0.00      BrD ATOM   1680 HG12 ILE   101      -7.350  -
9.516   8.212  1.00  0.00      BrD ATOM   1681 CG2  ILE   101      -5.509  -
9.894   6.177  1.00  0.00      BrD ATOM   1682 HG21 ILE   101      -6.221  -
10.659   5.902  1.00  0.00     BrD ATOM   1683 HG22 ILE   101      -4.905  -
10.244   7.001  1.00  0.00     BrD ATOM   1684 HG23 ILE   101      -4.874  -
9.673   5.333  1.00  0.00      BrD ATOM   1685  CD1 ILE   101      -8.470  -
9.885   6.461  1.00  0.00      BrD ATOM   1686 HD11 ILE   101      -9.158  -
10.406   7.109  1.00  0.00     BrD ATOM   1687 HD12 ILE   101      -7.869  -
10.604   5.922  1.00  0.00     BrD ATOM   1688 HD13 ILE   101      -9.024  -
9.281   5.758  1.00  0.00      BrD ATOM   1689  C   ILE   101      -4.084  -
7.408   6.802  1.00  0.00      BrD ATOM   1690  O   ILE   101      -2.993  -
7.580   7.345  1.00  0.00      BrD ATOM   1691  N   LEU   102      -4.206  -
6.890   5.579  1.00  0.00      BrD ATOM   1692  HN  LEU   102      -5.100  -
6.770   5.196  1.00  0.00      BrD ATOM   1693  CA  LEU   102      -3.033  -
6.488   4.800  1.00  0.00      BrD ATOM   1694  HA  LEU   102      -2.519  -
7.384   4.485  1.00  0.00      BrD ATOM   1695  CB  LEU   102      -3.454  -
5.690   3.565  1.00  0.00      BrD ATOM   1696  HB1 LEU   102      -4.530  -
5.734   3.485  1.00  0.00      BrD ATOM   1697  HB2 LEU   102      -3.164  -
4.661   3.717  1.00  0.00      BrD ATOM   1698  CG  LEU   102      -2.852  -
6.166   2.236  1.00  0.00      BrD ATOM   1699  HG  LEU   102      -2.990  -
5.394   1.493  1.00  0.00      BrD ATOM   1700  CD1 LEU   102      -3.570  -
7.417   1.745  1.00  0.00      BrD ATOM   1701 HD11 LEU   102      -4.201  -
7.803   2.533  1.00  0.00      BrD ATOM   1702 HD12 LEU   102      -2.843  -
8.165   1.468  1.00  0.00      BrD ATOM   1703 HD13 LEU   102      -4.180  -
7.170   0.887  1.00  0.00      BrD ATOM   1704  CD2 LEU   102      -1.353  -
6.418   2.376  1.00  0.00      BrD ATOM   1705 HD21 LEU   102      -1.167  -
7.481   2.412  1.00  0.00      BrD ATOM   1706 HD22 LEU   102      -0.992  -
5.959   3.285  1.00  0.00      BrD ATOM   1707 HD23 LEU   102      -0.833  -
5.992   1.529  1.00  0.00      BrD ATOM   1708  C   LEU   102      -2.087  -
5.649   5.649  1.00  0.00      BrD ATOM   1709  O   LEU   102      -0.868  -
5.770   5.546  1.00  0.00      BrD ATOM   1710  N   GLU   103      -2.661  -
4.792   6.486  1.00  0.00      BrD ATOM   1711  HN  GLU   103      -3.639  -
4.747   6.528  1.00  0.00      BrD ATOM   1712  CA  GLU   103      -1.872  -
3.948   7.369  1.00  0.00      BrD ATOM   1713  HA  GLU   103      -1.199  -
3.364   6.758  1.00  0.00      BrD ATOM   1714  CB  GLU   103      -2.781  -
3.002   8.159  1.00  0.00      BrD ATOM   1715  HB1 GLU   103      -3.230  -
2.297   7.475  1.00  0.00      BrD ATOM   1716  HB2 GLU   103      -3.559  -
3.579   8.627  1.00  0.00      BrD ATOM   1717  CG  GLU   103      -2.060  -
2.222   9.242  1.00  0.00      BrD ATOM   1718  HG1 GLU   103      -2.356  -
2.611  10.205  1.00  0.00      BrD ATOM   1719  HG2 GLU   103      -0.999  -
2.356   9.112  1.00  0.00      BrD ATOM   1720  CD  GLU   103      -2.373  -
0.740   9.200  1.00  0.00      BrD ATOM   1721  OE1 GLU   103      -2.248  -
0.077  10.251  1.00  0.00      BrD ATOM   1722  OE2 GLU   103      -2.745  -
0.242   8.117  1.00  0.00      BrD ATOM   1723  C   GLU   103      -1.052  -
4.808   8.322  1.00  0.00      BrD ATOM   1724  O   GLU   103       0.175  -
4.759   8.317  1.00  0.00      BrD ATOM   1725  N   LYS   104      -1.740  -
5.627   9.114  1.00  0.00      BrD ATOM   1726  HN  LYS   104      -2.720  -
5.629   9.066  1.00  0.00      BrD ATOM   1727  CA  LYS   104      -1.072  -
6.511  10.062  1.00  0.00      BrD ATOM   1728  HA  LYS   104      -0.569  -
5.894  10.792  1.00  0.00      BrD ATOM   1729  CB  LYS   104      -2.097  -
7.395  10.777  1.00  0.00      BrD ATOM   1730  HB1 LYS   104      -2.976  -
7.479  10.157  1.00  0.00      BrD ATOM   1731  HB2 LYS   104      -1.670  -
8.377  10.917  1.00  0.00      BrD ATOM   1732  CG  LYS   104      -2.520  -
6.861  12.136  1.00  0.00      BrD ATOM   1733  HG1 LYS   104      -3.354  -
7.445  12.497  1.00  0.00      BrD ATOM   1734  HG2 LYS   104      -1.691  -
6.951  12.822  1.00  0.00      BrD ATOM   1735  CD  LYS   104      -2.938  -
5.401  12.056  1.00  0.00      BrD ATOM   1736  HD1 LYS   104      -2.817  -
5.059  11.039  1.00  0.00      BrD ATOM   1737  HD2 LYS   104      -2.306  -
4.819  12.712  1.00  0.00      BrD ATOM   1738  CE  LYS   104      -4.387  -
5.210  12.469  1.00  0.00      BrD ATOM   1739  HE1 LYS   104      -4.975  -
5.002  11.587  1.00  0.00      BrD ATOM   1740  HE2 LYS   104      -4.741  -
6.120  12.930  1.00  0.00      BrD ATOM   1741  NZ  LYS   104      -4.547  -
4.085  13.432  1.00  0.00      BrD ATOM   1742  HZ1 LYS   104      -5.135  -
4.384  14.236  1.00  0.00      BrD ATOM   1743  HZ2 LYS   104      -5.004  -
3.277  12.964  1.00  0.00      BrD ATOM   1744  HZ3 LYS   104      -3.618  -
3.785  13.788  1.00  0.00      BrD ATOM   1745  C   LYS   104      -0.039  -
7.383   9.357  1.00  0.00      BrD ATOM   1746  O   LYS   104       1.021  -
7.678   9.910  1.00  0.00      BrD ATOM   1747  N   PHE   105      -0.357  -
7.796   8.135  1.00  0.00      BrD ATOM   1748  HN  PHE   105      -1.217  -
7.528   7.749  1.00  0.00      BrD ATOM   1749  CA  PHE   105       0.541  -
8.636   7.352  1.00  0.00      BrD ATOM   1750  HA  PHE   105       0.954  -
9.385   8.011  1.00  0.00      BrD ATOM   1751  CB  PHE   105      -0.229  -
9.331   6.228  1.00  0.00      BrD ATOM   1752  HB1 PHE   105       0.455  -
9.569   5.426  1.00  0.00      BrD ATOM   1753  HB2 PHE   105      -0.992  -
8.662   5.857  1.00  0.00      BrD ATOM   1754  CG  PHE   105      -0.899  -
10.604   6.658  1.00  0.00     BrD ATOM   1755  CD1 PHE   105      -0.202  -
11.559   7.381  1.00  0.00     BrD ATOM   1756  HD1 PHE   105       0.833  -
11.381   7.633  1.00  0.00     BrD ATOM   1757  CD2 PHE   105      -2.226  -
10.844   6.342  1.00  0.00     BrD ATOM   1758  HD2 PHE   105      -2.779  -
10.106   5.780  1.00  0.00     BrD ATOM   1759  CE1 PHE   105      -0.816  -
12.730   7.780  1.00  0.00     BrD ATOM   1760  HE1 PHE   105      -0.262  -
13.467   8.342  1.00  0.00     BrD ATOM   1761  CE2 PHE   105      -2.846  -
12.013   6.738  1.00  0.00     BrD ATOM   1762  HE2 PHE   105      -3.881  -
12.188   6.485  1.00  0.00     BrD ATOM   1763  CZ  PHE   105      -2.140  -
12.958   7.458  1.00  0.00     BrD ATOM   1764  HZ  PHE   105      -2.623  -
13.873   7.768  1.00  0.00     BrD ATOM   1765  C   PHE   105       1.684  -
7.817   6.766  1.00  0.00      BrD ATOM   1766  O   PHE   105       2.845  -
7.998   7.133  1.00  0.00      BrD ATOM   1767  N   PHE   106       1.347  -
6.917   5.849  1.00  0.00      BrD ATOM   1768  HN  PHE   106       0.405  -
6.824   5.595  1.00  0.00      BrD ATOM   1769  CA  PHE   106       2.344  -
6.075   5.202  1.00  0.00      BrD ATOM   1770  HA  PHE   106       2.956  -
6.711   4.579  1.00  0.00      BrD ATOM   1771  CB  PHE   106       1.665  -
5.021   4.325  1.00  0.00      BrD ATOM   1772 HB1  PHE   106       0.985  -
5.512   3.644  1.00  0.00      BrD ATOM   1773 HB2  PHE   106       1.110  -
4.341   4.954  1.00  0.00      BrD ATOM   1774  CG  PHE   106       2.633  -
4.213   3.510  1.00  0.00      BrD ATOM   1775 CD1  PHE   106       3.519  -
4.836   2.649  1.00  0.00      BrD ATOM   1776 HD1  PHE   106       3.508  -
5.913   2.565  1.00  0.00      BrD ATOM   1777 CD2  PHE   106       2.662  -
2.831   3.612  1.00  0.00      BrD ATOM   1778 HD2  PHE   106       1.974  -
2.333   4.279  1.00  0.00      BrD ATOM   1779 CE1  PHE   106       4.413  -
4.098   1.898  1.00  0.00      BrD ATOM   1780 HE1  PHE   106       5.098  -
4.598   1.229  1.00  0.00      BrD ATOM   1781 CE2  PHE   106       3.548  -
2.086   2.857  1.00  0.00      BrD ATOM   1782 HE2  PHE   106       3.562  -
1.010   2.946  1.00  0.00      BrD ATOM   1783  CZ  PHE   106       4.432  -
2.721   2.005  1.00  0.00      BrD ATOM   1784  HZ  PHE   106       5.127  -
2.142   1.417  1.00  0.00      BrD ATOM   1785  C   PHE   106       3.236  -
5.388   6.230  1.00  0.00      BrD ATOM   1786  O   PHE   106       4.439  -
5.637   6.282  1.00  0.00      BrD ATOM   1787  N   PHE   107       2.643  -
4.516   7.043  1.00  0.00      BrD ATOM   1788  HN  PHE   107       1.679  -
4.349   6.948  1.00  0.00      BrD ATOM   1789  CA  PHE   107       3.401  -
3.784   8.058  1.00  0.00      BrD ATOM   1790  HA  PHE   107       4.035  -
3.076   7.543  1.00  0.00      BrD ATOM   1791  CB  PHE   107       2.462  -
3.014   8.995  1.00  0.00      BrD ATOM   1792 HB1  PHE   107       1.719  -
3.692   9.384  1.00  0.00      BrD ATOM   1793 HB2  PHE   107       3.040  -
2.618   9.817  1.00  0.00      BrD ATOM   1794  CG  PHE   107       1.741  -
1.858   8.345  1.00  0.00      BrD ATOM   1795 CD1  PHE   107       1.007  -
0.971   9.117  1.00  0.00      BrD ATOM   1796 HD1  PHE   107       0.954  -
1.118  10.186  1.00  0.00      BrD ATOM   1797 CD2  PHE   107       1.798  -
1.652   6.972  1.00  0.00      BrD ATOM   1798 HD2  PHE   107       2.368  -
2.334   6.357  1.00  0.00      BrD ATOM   1799 CE1  PHE   107       0.345
0.095   8.537  1.00  0.00      BrD ATOM   1800 HE1  PHE   107      -0.224
0.776   9.151  1.00  0.00      BrD ATOM   1801 CE2  PHE   107       1.137  -
0.588   6.387  1.00  0.00      BrD ATOM   1802 HE2  PHE   107       1.192  -
0.439   5.318  1.00  0.00      BrD ATOM   1803  CZ  PHE   107       0.410
0.286   7.171  1.00  0.00      BrD ATOM   1804  HZ  PHE   107      -0.108
1.118   6.718  1.00  0.00      BrD ATOM   1805  C   PHE   107       4.287  -
4.727   8.867  1.00  0.00      BrD ATOM   1806  O   PHE   107       5.369  -
4.345   9.312  1.00  0.00      BrD ATOM   1807  N   SER   108       3.825  -
5.960   9.054  1.00  0.00      BrD ATOM   1808  HN  SER   108       2.968  -
6.218   8.654  1.00  0.00      BrD ATOM   1809  CA  SER   108       4.607  -
6.959   9.773  1.00  0.00      BrD ATOM   1810  HA  SER   108       4.981  -
6.503  10.678  1.00  0.00      BrD ATOM   1811  CB  SER   108       3.740  -
8.166  10.136  1.00  0.00      BrD ATOM   1812 HB1  SER   108       2.987  -
7.864  10.848  1.00  0.00      BrD ATOM   1813 HB2  SER   108       3.262  -
8.546   9.245  1.00  0.00      BrD ATOM   1814  OG  SER   108       4.521  -
9.200  10.711  1.00  0.00      BrD ATOM   1815  HG  SER   108       4.902  -
9.739  10.014  1.00  0.00      BrD ATOM   1816  C   SER   108       5.784  -
7.395   8.915  1.00  0.00      BrD ATOM   1817  O   SER   108       6.887  -
7.618   9.413  1.00  0.00      BrD ATOM   1818  N   LYS   109       5.540  -
7.475   7.613  1.00  0.00      BrD ATOM   1819  HN  LYS   109       4.643  -
7.256   7.283  1.00  0.00      BrD ATOM   1820  CA  LYS   109       6.578  -
7.819   6.656  1.00  0.00      BrD ATOM   1821  HA  LYS   109       7.113  -
8.679   7.032  1.00  0.00      BrD ATOM   1822  CB  LYS   109       5.950  -
8.163   5.306  1.00  0.00      BrD ATOM   1823 HB1  LYS   109       4.898  -
7.922   5.340  1.00  0.00      BrD ATOM   1824 HB2  LYS   109       6.421  -
7.566   4.542  1.00  0.00      BrD ATOM   1825  CG  LYS   109       6.090  -
9.626   4.926  1.00  0.00      BrD ATOM   1826 HG1  LYS   109       5.522  -
9.811   4.026  1.00  0.00      BrD ATOM   1827 HG2  LYS   109       7.133  -
9.844   4.748  1.00  0.00      BrD ATOM   1828  CD  LYS   109       5.577  -
10.535   6.029  1.00  0.00     BrD ATOM   1829 HD1  LYS   109       6.413  -
10.864   6.629  1.00  0.00     BrD ATOM   1830 HD2  LYS   109       4.885  -
9.981   6.646  1.00  0.00      BrD ATOM   1831  CE  LYS   109       4.866  -
11.751   5.462  1.00  0.00     BrD ATOM   1832 HE1  LYS   109       5.179  -
11.889   4.438  1.00  0.00     BrD ATOM   1833 HE2  LYS   109       3.801  -
11.575   5.491  1.00  0.00     BrD ATOM   1834  NZ  LYS   109       5.175  -
12.986   6.235  1.00  0.00     BrD ATOM   1835 HZ1  LYS   109       6.202  -
13.148   6.254  1.00  0.00     BrD ATOM   1836 HZ2  LYS   109       4.715  -
13.808   5.795  1.00  0.00     BrD ATOM   1837 HZ3  LYS   109       4.831  -
12.892   7.212  1.00  0.00     BrD ATOM   1838  C   LYS   109       7.547  -
6.653   6.504  1.00  0.00      BrD ATOM   1839  O   LYS   109       8.761  -
6.842   6.428  1.00  0.00      BrD ATOM   1840  N   ILE   110       6.994  -
5.441   6.492  1.00  0.00      BrD ATOM   1841  HN  ILE   110       6.022  -
5.363   6.581  1.00  0.00      BrD ATOM   1842  CA  ILE   110       7.796  -
4.223   6.407  1.00  0.00      BrD ATOM   1843  HA  ILE   110       8.198  -
4.138   5.405  1.00  0.00      BrD ATOM   1844  CB  ILE   110       6.935  -
2.973   6.692  1.00  0.00      BrD ATOM   1845  HB  ILE   110       6.496  -
3.087   7.671  1.00  0.00      BrD ATOM   1846 CG1  ILE   110       5.811  -
2.844   5.654  1.00  0.00      BrD ATOM   1847 HG11 ILE   110       5.353  -
3.811   5.511  1.00  0.00      BrD ATOM   1848 HG12 ILE   110       5.068  -
2.153   6.026  1.00  0.00      BrD ATOM   1849 CG2  ILE   110       7.798  -
1.722   6.712  1.00  0.00      BrD ATOM   1850 HG21 ILE   110       8.756  -
1.945   6.264  1.00  0.00      BrD ATOM   1851 HG22 ILE   110       7.944  -
1.401   7.732  1.00  0.00      BrD ATOM   1852 HG23 ILE   110       7.311  -
0.938   6.152  1.00  0.00      BrD ATOM   1853  CD1 ILE   110       6.269  -
2.345   4.297  1.00  0.00      BrD ATOM   1854 HD11 ILE   110       6.222  -
3.153   3.583  1.00  0.00      BrD ATOM   1855 HD12 ILE   110       7.283  -
1.985   4.366  1.00  0.00      BrD ATOM   1856 HD13 ILE   110       5.623  -
1.540   3.971  1.00  0.00      BrD ATOM   1857  C   ILE   110       8.948  -
4.274   7.411  1.00  0.00      BrD ATOM   1858  O   ILE   110      10.104  -
4.045   7.060  1.00  0.00      BrD ATOM   1859  N   LYS   111       8.615  -
4.582   8.662  1.00  0.00      BrD ATOM   1860  HN  LYS   111       7.674  -
4.752   8.875  1.00  0.00      BrD ATOM   1861  CA  LYS   111       9.608  -
4.664   9.730  1.00  0.00      BrD ATOM   1862  HA  LYS   111       9.919  -
3.660   9.972  1.00  0.00      BrD ATOM   1863  CB  LYS   111       8.989  -
5.308  10.972  1.00  0.00      BrD ATOM   1864 HB1  LYS   111       9.742  -
5.373  11.743  1.00  0.00      BrD ATOM   1865 HB2  LYS   111       8.661  -
6.304  10.718  1.00  0.00      BrD ATOM   1866  CG  LYS   111       7.801  -
4.542  11.528  1.00  0.00      BrD ATOM   1867 HG1  LYS   111       7.127  -
4.304  10.718  1.00  0.00      BrD ATOM   1868 HG2  LYS   111       7.293  -
5.162  12.252  1.00  0.00      BrD ATOM   1869  CD  LYS   111       8.237  -
3.252  12.203  1.00  0.00      BrD ATOM   1870 HD1  LYS   111       8.872  -
2.701  11.525  1.00  0.00      BrD ATOM   1871 HD2  LYS   111       7.361  -
2.666  12.437  1.00  0.00      BrD ATOM   1872  CE  LYS   111       9.006  -
3.527  13.485  1.00  0.00      BrD ATOM   1873 HE1  LYS   111      10.044  -
3.698  13.239  1.00  0.00      BrD ATOM   1874 HE2  LYS   111       8.597  -
4.411  13.952  1.00  0.00      BrD ATOM   1875  NZ  LYS   111       8.916  -
2.389  14.442  1.00  0.00      BrD ATOM   1876 HZ1  LYS   111       9.335  -
2.656  15.356  1.00  0.00      BrD ATOM   1877 HZ2  LYS   111       7.921  -
2.127  14.593  1.00  0.00      BrD ATOM   1878 HZ3  LYS   111       9.428  -
1.565  14.066  1.00  0.00      BrD ATOM   1879  C   LYS   111      10.828  -
5.465   9.289  1.00  0.00      BrD ATOM   1880  O   LYS   111      11.964  -
5.112   9.607  1.00  0.00      BrD ATOM   1881  N   GLU   112      10.585  -
6.549   8.561  1.00  0.00      BrD ATOM   1882  HN  GLU   112       9.658  -
6.780   8.344  1.00  0.00      BrD ATOM   1883  CA  GLU   112      11.662  -
7.407   8.085  1.00  0.00      BrD ATOM   1884  HA  GLU   112      12.330  -
7.588   8.914  1.00  0.00      BrD ATOM   1885  CB  GLU   112      11.098  -
8.745   7.600  1.00  0.00      BrD ATOM   1886 HB1  GLU   112      10.589  -
8.589   6.661  1.00  0.00      BrD ATOM   1887 HB2  GLU   112      11.917  -
9.432   7.445  1.00  0.00      BrD ATOM   1888  CG  GLU   112      10.120  -
9.383   8.573  1.00  0.00      BrD ATOM   1889 HG1  GLU   112      10.678  -
9.856   9.367  1.00  0.00      BrD ATOM   1890 HG2  GLU   112       9.489  -
8.611   8.987  1.00  0.00      BrD ATOM   1891  CD  GLU   112       9.240  -
10.425   7.912  1.00  0.00     BrD ATOM   1892 OE1  GLU   112       9.625  -
10.932   6.837  1.00  0.00     BrD ATOM   1893 OE2  GLU   112       8.165  -
10.734   8.468  1.00  0.00     BrD ATOM   1894  C   GLU   112      12.447  -
6.739   6.960  1.00  0.00      BrD ATOM   1895  O   GLU   112      13.583  -
7.120   6.677  1.00  0.00      BrD ATOM   1896  N   ALA   113      11.840  -
5.744   6.318  1.00  0.00      BrD ATOM   1897  HN  ALA   113      10.932  -
5.486   6.579  1.00  0.00      BrD ATOM   1898  CA  ALA   113      12.492  -
5.046   5.216  1.00  0.00      BrD ATOM   1899  HA  ALA   113      13.355  -
5.620   4.936  1.00  0.00      BrD ATOM   1900  CB  ALA   113      11.573  -
4.989   4.008  1.00  0.00      BrD ATOM   1901 HB1  ALA   113      11.649  -
5.914   3.455  1.00  0.00      BrD ATOM   1902 HB2  ALA   113      11.865  -
4.166   3.373  1.00  0.00      BrD ATOM   1903 HB3  ALA   113      10.554  -
4.848   4.336  1.00  0.00      BrD ATOM   1904  C   ALA   113      12.953  -
3.645   5.624  1.00  0.00      BrD ATOM   1905  O   ALA   113      13.778  -
3.035   4.943  1.00  0.00      BrD ATOM   1906  N   GLY   114      12.435  -
3.146   6.743  1.00  0.00      BrD ATOM   1907  HN  GLY   114      11.790  -
3.678   7.255  1.00  0.00      BrD ATOM   1908  CA  GLY   114      12.833  -
1.836   7.229  1.00  0.00      BrD ATOM   1909  HA1 GLY   114      12.506  -
1.732   8.253  1.00  0.00      BrD ATOM   1910  HA2 GLY   114      13.911  -
1.769   7.200  1.00  0.00      BrD ATOM   1911  C   GLY   114      12.252  -
0.695   6.414  1.00  0.00      BrD ATOM   1912  O   GLY   114      12.991
0.085   5.813  1.00  0.00      BrD ATOM   1913  N   LEU   115      10.927  -
0.590   6.405  1.00  0.00      BrD ATOM   1914  HN  LEU   115      10.398  -
1.231   6.921  1.00  0.00      BrD ATOM   1915  CA  LEU   115      10.244
0.482   5.683  1.00  0.00      BrD ATOM   1916  HA  LEU   115      10.991
1.195   5.369  1.00  0.00      BrD ATOM   1917  CB  LEU   115       9.523  -
0.066   4.442  1.00  0.00      BrD ATOM   1918 HB1  LEU   115       8.622  -
0.563   4.768  1.00  0.00      BrD ATOM   1919 HB2  LEU   115       9.240
0.773   3.824  1.00  0.00      BrD ATOM   1920  CG  LEU   115      10.312  -
1.047   3.570  1.00  0.00      BrD ATOM   1921  HG  LEU   115       9.929  -
1.000   2.565  1.00  0.00      BrD ATOM   1922 CD1  LEU   115      10.120  -
2.469   4.061  1.00  0.00      BrD ATOM   1923 HD11 LEU   115      10.216  -
3.149   3.228  1.00  0.00      BrD ATOM   1924 HD12 LEU   115       9.137  -
2.571   4.493  1.00  0.00      BrD ATOM   1925 HD13 LEU   115      10.868  -
2.699   4.804  1.00  0.00      BrD ATOM   1926 CD2  LEU   115      11.790  -
0.683   3.517  1.00  0.00      BrD ATOM   1927 HD21 LEU   115      12.358  -
1.397   4.094  1.00  0.00      BrD ATOM   1928 HD22 LEU   115      11.932
0.306   3.924  1.00  0.00      BrD ATOM   1929 HD23 LEU   115      12.127  -
0.701   2.491  1.00  0.00      BrD ATOM   1930  C   LEU   115       9.246
1.193   6.603  1.00  0.00      BrD ATOM   1931  O   LEU   115       9.407
1.183   7.823  1.00  0.00      BrD ATOM   1932  N   ILE   116       8.209
1.801   6.018  1.00  0.00      BrD ATOM   1933  HN  ILE   116       8.131
1.787   5.043  1.00  0.00      BrD ATOM   1934  CA  ILE   116       7.196
2.518   6.794  1.00  0.00      BrD ATOM   1935  HA  ILE   116       7.614
3.470   7.083  1.00  0.00      BrD ATOM   1936  CB  ILE   116       5.930
2.786   5.956  1.00  0.00      BrD ATOM   1937  HB  ILE   116       5.183
3.218   6.605  1.00  0.00      BrD ATOM   1938 CG1  ILE   116       5.388
1.480   5.367  1.00  0.00      BrD ATOM   1939 HG11 ILE   116       4.697
1.713   4.570  1.00  0.00      BrD ATOM   1940 HG12 ILE   116       6.209
0.904   4.968  1.00  0.00      BrD ATOM   1941 CG2  ILE   116       6.228
3.786   4.850  1.00  0.00      BrD ATOM   1942 HG21 ILE   116       5.309
4.261   4.538  1.00  0.00      BrD ATOM   1943 HG22 ILE   116       6.671
3.271   4.010  1.00  0.00      BrD ATOM   1944 HG23 ILE   116       6.914
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4.534   5.217  1.00  0.00      BrD ATOM   1945  CD1 ILE   116      4.662
0.615   6.373  1.00  0.00      BrD ATOM   1946  HD11 ILE  116      3.870
0.073   5.875  1.00  0.00      BrD ATOM   1947  HD12 ILE  116      4.240
1.238   7.147  1.00  0.00      BrD ATOM   1948  HD13 ILE  116      5.356      -
0.086   6.812  1.00  0.00      BrD ATOM   1949  C   ILE   116      6.802
1.751   8.053  1.00  0.00      BrD ATOM   1950  O   ILE   116      7.024
0.544   8.154  1.00  0.00      BrD ATOM   1951  N   ASP   117      6.222
3.424   8.874  1.00  0.00      BrD ATOM   1952  HN  ASP   117      6.079
1.862  10.275  1.00  0.00      BrD ATOM   1953  CA  ASP   117      5.805
2.585  10.798  1.00  0.00      BrD ATOM   1954  HA  ASP   117      5.197
0.609  10.013  1.00  0.00      BrD ATOM   1955  CB  ASP   117      4.967      -
0.267  10.220  1.00  0.00      BrD ATOM   1956  HB1 ASP   117      5.564
0.596   8.976  1.00  0.00      BrD ATOM   1957  HB2 ASP   117      4.664
0.555  10.876  1.00  0.00      BrD ATOM   1958  CG  ASP   117      3.722
1.488  10.787  1.00  0.00      BrD ATOM   1959  OD1 ASP   117      2.897
0.421  11.641  1.00  0.00      BrD ATOM   1960  OD2 ASP   117      3.572      -
1.506  11.154  1.00  0.00      BrD ATOM   1961  C   ASP   117      7.006
0.892  12.209  1.00  0.00      BrD ATOM   1962  O   ASP   117      6.846
1.897  10.725  1.00  0.00      BrD ATOM   1963  N   LYS   118      8.206
2.384  9.879  1.00  0.00       BrD ATOM   1964  HN  LYS   118      8.282
1.613  11.488  1.00  0.00      BrD ATOM   1965  CA  LYS   118      9.416
2.063  10.968  1.00  0.00      BrD ATOM   1966  HA  LYS   118     10.248
2.220  12.489  1.00  0.00      BrD ATOM   1967  CB  LYS   118      9.315
1.594  13.149  1.00  0.00      BrD ATOM   1968  HB1 LYS   118      8.636
3.159  13.395  1.00  0.00      BrD ATOM   1969  HB2 LYS   118     10.292
3.656  12.296  1.00  0.00      BrD ATOM   1970  CG  LYS   118      8.810
3.719  12.911  1.00  0.00      BrD ATOM   1971  HG1 LYS   118      7.921
3.946  13.911  1.00  0.00      BrD ATOM   1972  HG2 LYS   118      8.595
4.608  12.327  1.00  0.00      BrD ATOM   1973  CD  LYS   118      9.857
4.972  13.133  1.00  0.00      BrD ATOM   1974  HD1 LYS   118     10.477
4.075  11.613  1.00  0.00      BrD ATOM   1975  HD2 LYS   118     10.468
5.794  11.631  1.00  0.00      BrD ATOM   1976  CE  LYS   118      8.500
5.425  10.902  1.00  0.00      BrD ATOM   1977  HE1 LYS   118      8.080
6.386  12.369  1.00  0.00      BrD ATOM   1978  HE2 LYS   118      8.687
6.652  10.943  1.00  0.00      BrD ATOM   1979  NZ  LYS   118     10.212
6.458  11.316  1.00  0.00      BrD ATOM   1980  HZ1 LYS   118     11.163
7.656  11.096  1.00  0.00      BrD ATOM   1981  HZ2 LYS   118      9.989
6.459   9.921  1.00  0.00      BrD ATOM   1982  HZ3 LYS   118     10.206
0.110  11.591  1.00  0.00      BrD ATOM   1983  C   LYS   118      9.657
0.641  10.802  1.00  0.00      BrD ATOM   1984  OT1 LYS   118      9.047      -
0.302  12.459  1.00  0.00      BrD END    1985  OT2 LYS   118     10.454      -
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